2022 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GADSDEN
ASH POND

August 1, 2022

Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

Alabama Power

CERTIFICATION STATEMENT

This 2022 *Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Gadsden Ash Pond* has been prepared in accordance with the United States Environmental Protection Agency's coal combustion residual rule (40 CFR Part 257, Subpart D), ADEM Admin. Code r. 335-13-15, and Part E of ADEM Administrative Order No. 18-095-GW, under the supervision of a licensed professional engineer in the State of Alabama. As such, I certify that the information contained herein is true and accurate to the best of my knowledge.

Gregory Budd

08/01/2022

Gregory F Budd, P.G.
AL Registered Professional Geologist No. 1455 Date

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EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart 257), the Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 19-104-GW, this 2022 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document groundwater monitoring activities and results from the October 2021 and May 2022 semi-annual monitoring event at the Alabama Power Company (APC) Gadsden Electric Generating Plant (Plant Gadsden) Ash Pond and satisfies the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), ADEM Admin. Code r. 335-13-15-.06(5)(g), and Part F of AO No. 19-104-GW. Semi-annual monitoring and associated reporting for the Ash Pond is performed in accordance with the monitoring requirements found in 40 CFR § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

The CCR unit began the monitoring period in Assessment Monitoring pursuant to 40 CFR § 257.95 and ADEM Admin. Code r. 335-13-15-.06(6). Statistically significant increases (SSIs) of Appendix III constituents over background were identified in the results of the first detection monitoring event (April 17, 2019) and assessment monitoring was initiated on July 16, 2019. Statistically significant levels (SSLs) of Appendix IV parameters above groundwater protection standards (GWPS) were identified while in assessment monitoring. Consequently, an assessment of corrective measures (ACM) was initiated on April 11, 2020 and completed on July 10, 2020 according to the requirements of § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 19-104-GW. The ACM was subsequently submitted to ADEM and posted to the CCR compliance web site. A public meeting to discuss the ACM was held on October 19, 2020.

Since the submittal of the ACM extensive Site investigations have been performed to select effective corrective measures to address SSLs above GWPS. A Groundwater Remedy Selection Report was prepared to meet the requirements of § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.19-104-GW and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022 for review.

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

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

SSLs of Appendix IV parameters arsenic and lithium were detected above GWPS during the October 2021 and May 2022 semi-annual monitoring events. The following summarizes semi-annual groundwater monitoring activities at Plant Gadsden Ash Pond:

- Completed the first semi-annual assessment groundwater sampling event in October 2021 and submitted the semi-annual groundwater and corrective action report to ADEM on February 1, 2022.
- Submitted the Groundwater Remedy Selection Report in accordance with § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No.19-104-GW on October 29, 2021.
- Submitted a Corrective Action Groundwater Monitoring Program document presenting the groundwater corrective action remedies to be implemented at the Site to meet § 257.98 and ADEM Admin. Code r. 335-13-15-.06(9) on January 27, 2021.
- Collected soil and groundwater samples for treatability studies using Site aquifer media and impacted groundwater prior to field implementation of an injection treatment pilot study between February 14, 2022 and May 17, 2022. The treatability studies will evaluate the effectiveness of various treatment solutions and doses in removing constituents of interest (COIs) from impacted groundwater.
- Completed the first semi-annual assessment groundwater sampling event between May 9, 2022 and May 17, 2022. Additional groundwater samples were collected during the first semi-annual monitoring event for the proposed injection treatability studies.
- Collected additional MNA parameters along with May 2022 sampling event for helping to establish baseline conditions and to provide input into geochemical modeling and future MNA monitoring/evaluation.
- Pursuant to 40 CFR 257.90(e)(6), a Monitoring Period Summary table has been prepared to describe the status of groundwater monitoring and corrective action during the monitoring period for this report.

The CCR unit concluded the monitoring period in corrective action and APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program submitted to ADEM. The following future actions will be taken or are recommended for the site to further evaluate remedy selection:

- Conduct batch testing to evaluate removal of COIs, and selection of the optimum reagents and doses for column tests.
- Conduct column testing to evaluate removal of COIs by mixing treatment reagents with site-specific impacted groundwater and applying to site-specific soils (aquifer solids) in columns; Appendix III and IV constituents will be measured in the column effluents to determine the reduction of COIs in groundwater, and to evaluate any unintended consequences of treatment (e.g., release of constituents from soils).
- Conduct selective sequential extraction of post-column (treated) soils to help determine the sequestration mechanisms and stability of the COIs and their host solids.
- After treatment, the post-column (treated) soils will be leached with upgradient (background) groundwater from the respective plant in additional column studies, to help assess long-term stability of the COIs and their host solids.
- Prepare Class V UIC permit.
- Prepare and implement a work plan to evaluate Site bedrock (Conasauga shale/mudstone) as a geogenic source of lithium and potential mechanisms to mobilize lithium into deeper Site wells recently installed for vertical delineation.
- Conduct the first semi-annual assessment monitoring event in the fall of 2022 and submit the annual groundwater monitoring and corrective action report summarizing the findings to ADEM by February 1, 2023.

Executive Summary Table.
Monitoring Period Summary
Plant Gadsden - Ash Pond

Assessment Monitoring Initiated: July 16, 2019
Monitoring Period: August 1, 2020 - July 31, 2022
Beginning Status: Corrective Action
Ending Status: Corrective Action

Statistical Analysis Results *	
Appendix III SSIs	
Parameter	**Wells**
Boron	GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, and GSD-AP-MW-11
Calcium	GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-5, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
Chloride	GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-1, GSD-AP-MW-12, and GSD-AP-PZ-5
Fluoride	None
pH	GSD-AP-MW-2, GSD-AP-MW-5, GSD-AP-MW-7, and GSD-AP-MW-12
Sulfate	GSD-AP-MW-1 and GSD-AP-MW-3
TDS	GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-11, and GSD-AP-MW-12
Appendix IV SSLs	
Parameter	**Wells**
Arsenic	GSD-AP-MW-2, GSD-AP-MW-4
Lithium	None
* See the attached report for further details regarding statistical exceedances and alternate source demonstrations.	
Assessment of Corrective Measures & Groundwater Remedy	
Assessment of Corrective Measures	
Date Initated:	April 11, 2020
Date Complete:	July 10, 2020
Public Meeting Date:	October 19, 2020
Groundwater Remedy	
Selected During Period:	Yes
Selection Date:	10/29/2021
Initiated During Period:	Yes
Ongoing During Period:	Yes

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ABBREVIATIONS

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

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

1.0 INTRODUCTION

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D) and the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, this 2021 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2021 semi-annual assessment groundwater monitoring activities at the Plant Gadsden Ash Pond (Ash Pond) and to satisfy the requirements of § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f). Semi-annual assessment monitoring and associated reporting for the Ash Pond is performed in accordance with the monitoring requirements 40 CFR § 257.90 through § 257.95 and ADEM Admin. Code r. 335-13-15-.06(1) through r. 335-13-15-.06(6).

Semi-Annual Groundwater Monitoring and Corrective Action Reports include an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (November 13, 2018) and corrective action activities completed since the submittal of the Corrective Action Groundwater Monitoring Program (January 27, 2022).

2.0 MONITORING PROGRAM STATUS

The site is currently in corrective action and APC will continue implementation of the selected groundwater remedies identified in the Groundwater Remedy Selection Report and the Corrective Action Groundwater Monitoring Program. In accordance with § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in July 2019. SSIs of Appendix III and SSLs of Appendix IV parameters were identified at the Gadsden Ash Pond during sampling events conducted in the fall of 2020 and spring of 2021. Pursuant to § 257.95(g)(3)(i) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(i), APC completed an ACM in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM AO No. 19-104-GW. The ACM was completed July 10, 2020, and a public meeting was held to discuss the ACM on October 19, 2020.

A Groundwater Remedy Selection Report was prepared to meet the requirements of § 257.97, ADEM Admin. Code r. 335-13-15-.06(8), and Part C of AO No. 19-104-GW and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022, for review.

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

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

3.0 SITE LOCATION AND DESCRIPTION

Plant Gadsden is located in the northeastern area of the city of Gadsden, in central Etowah County, Alabama. The physical address of the plant is 1000 Goodyear Avenue, Gadsden, AL 35903. Plant Gadsden occupies Sections 2, 3, and 11, Township 12 South, Range 6 East (USGS, 1986). The Ash Pond is located northeast of the plant and separated from the main plant by the Coosa River. **Figure 1, Site Location Map,** depicts the location of the Plant and Ash Pond with respect to the surrounding area.

3.1 PHYSICAL SETTING

Plant Gadsden is located within the Coosa Valley district of the Valley and Ridge physiographic section (Sapp and Emplaincourt, 1975). The neighboring Coosa River forms a broad, gently sloping valley with elevations ranging from 510 to 530 feet above mean sea level (MSL). To the west of the Coosa River is a series of ridges including Shinbone Ridge, Lookout Mountain, and Big Ridge, some of which reach elevations above 1,450 feet MSL (USGS, 1986). Local Site elevations near the Ash Pond are approximately 520 feet MSL. The embankment elevations that form the perimeter of the Ash Pond range from 520 to 525 feet MSL. **Figure 2**, **Site Topographic Map**, provides the topography of the Site.

3.2 SITE GEOLOGY AND HYDROGEOLOGY

Plant Gadsden is in the Appalachian thrust belt, which consists of a series of northeast trending thrust sheets and folds of Cambrian to Pennsylvanian strata. In general, the valleys represent eroded or breached anticlines underlain by Cambrian and Ordovician carbonates. The ridge crests are typically composed of relatively resistant sandstone and chert units and represent erosional remnants (Mann and Baker, 1995). The Appalachian thrust belt is bordered to the west by the Black Warrior basin, to the northwest by the East Warrior Platform, and to the north-northwest by the Nashville dome. It is bordered to the southeast by the Appalachian Piedmont (Osborne and Raymond, 1992).

A thrust fault lies near Plant Gadsden. The exact geometry and configuration of the fault is unknown because the fault is concealed under alluvium. To the north of the fault, folds and faults have a more moderate expression and generally trend to the northeast. To the south of the thrust fault, geologic structures become more complex, folding is more intense, and the structures trend in a more easterly orientation (Bossong, 1989). In general, faults in this region (including the Gadsden Fault) were active during the late Paleozoic Alleghanian orogeny but are not considered to be presently active. **Figure 3, Site Geologic Map**, illustrates the surface geology at the Site and neighboring areas.

Boring logs from monitoring well and piezometer installations provide details on subsurface geologic conditions between ground surface and 75 feet below ground surface (ft BGS). Site geology consists of two distinct formations underlying the Ash Pond, described from shallowest to deepest as follows:

1. Surficial soils are described as Quaternary-age alluvial low terrace deposits and high terrace deposits consisting of varying amounts of sand, silt, clay, and gravel associated with river deposition (Raymond et al., 1988). These deposits range from 20 to 30 feet in thickness at the Site. Site groundwater monitoring wells are installed within higher-permeability zones near the base of the alluvial deposits and near the interface with underlying rock.

2. The Conasauga Formation (Middle and Upper Cambrian), which consists of varying amounts of limestone, dolomite, and shale. Chert and siltstone horizons can be present locally. Limited core logs from the Site indicate the Conasauga to be a medium to dark gray mudstone or shale with noticeable calcite veining. In general, the Conasauga Formation is characterized as a shoaling-upward succession in which deep-water shale grades vertically into a diverse assemblage of carbonate ramp facies. In Etowah County, the Conasauga Formation has been targeted as a potential source for shale gas and is preserved within the Gadsden antiform (Pashin, 2008). The Conasauga Formation is not considered to be a water-bearing aquifer at the Site.

Figure 4A Geologic Cross-Sections A-A' and Figure 4B, **Geologic Cross-Sections B-B'** illustrate the geologic layering beneath the Site.

3.2.1 Uppermost Aquifer

The uppermost aquifer beneath the Site corresponds to a coarse and more permeable fraction of alluvial overburden soils and weathered or fractured rock near the soil-rock interface. The uppermost aquifer is typically located at depths between 15 and 50 feet below ground surface (BGS). Soils are generally poorly graded sands with layers of clay and well-graded gravels that overlay a mudstone or shale bedrock. Groundwater recharge to the uppermost aquifer is largely accomplished by infiltration of precipitation and subsequent percolation down to the water table. Monitoring wells are typically screened across reddish-brown (iron-coated) coarse sediments and/or weathered Conasauga mudstone/shale.

3.2.2 Flow Interpretation

Within overburden soils beneath the Site, groundwater flow occurs by porous (Darcy) flow mechanics with potential for preferential movement along more conductive sand and gravel lenses or channels. Slug and

Shelby Tube permeameter testing reveals that sandy fractions generally have a hydraulic conductivity between 0.5 and 7 feet per day.

Based on recent groundwater elevation data, it appears a localized groundwater divide is present in the drier later summer-fall season along the north side of the Ash Pond. During drier season monitoring events (August 2019, August 2020, and October 2021), groundwater elevations range from 2.4 to 7.8 feet lower in monitoring wells GSD-AP-PZ-1, GSD-AP-PZ-5, GSD-AP-PZ-6, GSD-AP-MW-18H, and GSD-AP-MW-19H when compared to the April 2020, March 2021, and May 2022 monitoring events.

The result of the localized groundwater divide is a temporary reversal of flow from south to north in the direction of an intermittent stream that flows seasonally in response to the seasonal rise in the water table. It is possible that seasonal changes in evapotranspiration may cause a rise and fall in the water table, which produces bidirectionality in both stream-groundwater head gradients. Hydraulic gradients across the site, and Ash Pond, decrease during the drier season months leading to slower groundwater flow velocities.

During wetter months or seasons, this localized groundwater divide is not apparent on potentiometric surface contour maps. Instead, groundwater flow is more uniform with a predominantly southern flow direction. Groundwater flows from northeast to southwest prior to shifting to a more southern flow direction beneath the ash pond. Groundwater northwest and west of the ash pond provides some variability with a more local western flow component.

Groundwater elevations fluctuate in response to rainfall. Fluctuations are typically greater further away from the Coosa River, which is consistent with groundwater recharge areas.

Upgradient wells, located on the opposite side of the Coosa River, demonstrate groundwater flow to the north or northeast. The Coosa River forms a groundwater divide separating the upgradient and downgradient flow regimes.

3.3 GROUNDWATER MONITORING SYSTEM

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

constructed using "Design and Installation of Groundwater Monitoring Wells in Aquifers," ASTM Subcommittee D18.21, as a guideline.

3.3.1 Monitoring Wells

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

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

3.3.1.1 Upgradient Wells

To evaluate upgradient well locations at the Site, groundwater elevations and CCR indicator parameters were reviewed. Radial flow has historically been observed at the Ash Pond and identifying a truly upgradient location in the vicinity was infeasible. To meet the requirements of the rules and establish background groundwater quality not affected by a release from the unit, on-site groundwater monitoring wells were installed within the same geologic formation as site monitoring wells and across the river from the Ash Pond. Monitoring well locations MW-14, MW-16, and MW-17 serve as upgradient locations for the Ash Pond. These well locations are located on the opposite side of the Coosa River and are hydraulically disconnected from downgradient flow away from the Gadsden Ash Pond. Groundwater flow in the area of upgradient locations is from south to north or southwest to northeast towards the Coosa River. **Table 1a**, summarizes the monitoring well construction details and design purpose.

3.3.1.2 Downgradient Wells

Monitoring well locations MW-1 through MW-12, PZ-1, PZ-2, PZ-5, and PZ-6 are used as downgradient locations. These well locations are proximal to the waste boundary to the north, east, south, and west of the Ash Pond. Because groundwater flow conditions can change seasonally in response to rainfall at the Site (as described in **Section 3.2.2**), wells previously identified as being downgradient to the north (GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-PZ-1, GSD-

AP-PZ-5, GSD-AP-PZ-6) now appear hydraulically upgradient of the Site or hydraulically separated from the Site by a localized groundwater divide. APC will continue to monitor all wells surrounding the Ash Pond as downgradient compliance wells until a revision to the network is proposed to and approved by ADEM. Changes to well designations are not recommended at this time. **Table 1a**, summarizes the monitoring well construction details and design purpose.

3.3.1.3 Delineation Wells

Pursuant to AO 19-104-GW, additional wells were installed in October 2019, January 2020, and March 2021. These delineation wells were installed to define the horizontal and vertical extent of arsenic and lithium MCL exceedances. Horizontal delineation wells GSD-AP-MW-18H, GSD-AP-MW-19H, and GSD-AP-MW-20H were installed in October 2019 north of compliance wells GSD-AP-MW-2/GSD-AP-MW-4 and in areas historically interpreted as downgradient of the Ash Pond.

Two vertical delineation wells, GSD-AP-MW-2V and GSD-AP-MW-4V, were installed in October 2019, and one vertical delineation well, GSD-AP-MW-2VA, was installed in January 2020, to delineate the vertical extent of MCL exceedances. Vertical delineation well GSD-AP-MW-2V did not yield sufficient groundwater for well development and has been converted to a temporary piezometer. As a result, GSD-AP-MW-2VA was installed to replace GSD-AP-MW-2V. Because GSD-AP-MW-2VA exhibited elevated lithium concentrations above the GWPS, a second, deeper vertical delineation well was proposed and GSD-AP-MW-2VB was installed in March 2021. These vertical delineation wells were installed adjacent to monitoring wells GSD-AP-MW-2 and GSD-AP-MW4 where elevated concentrations of constituents had been observed.

Following a review of the March 2021 analytical data, it was determined that additional (Phase III) vertical delineation was necessary to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA and GSD-AP-MW-2VB and further north and northwest in the direction of groundwater flow associated with the seasonal groundwater divide. Five vertical delineation wells (GSD-AP-MW-2VC, GSD-AP-MW21VB, GSD-P-MW-21VC, GSD-AP-MW-22VB, and GSD-AP-MW-23VB) were installed between August 17,2021 and September 3, 2021. Two of the vertical delineation wells (GSD-AP-MW-21VC and GSD-AP-MW-22VB) were successfully developed and sampled during the second 2021 semi-annual sampling event in October. Vertical delineation wells GSD-AP-MW-2VC, GSD-AP-MW21VB, and GSD-AP-MW-23VB did not produce sufficient water to be sampled and are designated as water level only piezometers.

Delineation wells are identified on **Figure 5** and detailed on **Table 1b**. All delineation wells are sampled semi-annually as part of the semi-annual assessment groundwater monitoring program.

3.3.1.4 Piezometers

Vertical delineation wells GSD-AP-MW-2V and GSD-AP-MW-2VC, GSD-AP-MW21VB, and GSD-AP-MW-23VB did not produce sufficient water for sampling. As a result, these wells have been designated as piezometers and will be used better define groundwater flow direction at the Site. **Table 1c**, summarizes the water level only piezometer construction details and design purpose.

3.3.1.5 Monitoring Well Replacement and Abandonment

No monitoring well replacements and/or abandonments were conducted during the reporting period.

3.4 GROUNDWATER MONITORING HISTORY

In accordance with § 257.94(b) and ADEM Admin. Code r. 335-13-15-.06(5)(b), eight independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to April 17, 2019. Background sampling was performed over the period of December 2017 to February 2019. Groundwater sampling for the first detection monitoring event after the background period was performed in February 2019.

Based on results of the 2018 and 2019 monitoring, APC initiated an assessment monitoring program on July 16, 2019. Pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a), monitoring wells were sampled for all Appendix IV parameters in August, within 90 days of initiating the assessment monitoring program.

The Site entered assessment monitoring pursuant to 40 CFR § 257.95(a) and ADEM Admin. Code r. 335-13-15-.06(6)(a) in July 2019. Statistical evaluations of the 2019 assessment monitoring data identified SSLs of Appendix IV constituents above the GWPS, and the Site entered Assessment of Corrective Measures. Pursuant to 40 CFR §257.95(g)(1), ADEM Admin. Code r. 335-13-15-.06(6)(g)2., and AO 19-104-GW, additional monitoring wells were installed to characterize the horizontal and vertical extent of GWPS exceedances identified during assessment monitoring in three phases of groundwater investigations between October 2019 and September 2021. These wells, along with the compliance monitoring well network, are sampled semi-annually. Delineation wells installed at the Site have been sampled concurrently with the compliance monitoring well network beginning with the first semi-annual sampling event after the well installation.

3.4.1 Available Monitoring Data

Laboratory analytical data is available for the groundwater monitoring history outlined in **Section 3.4.** Tables summarizing analytical data from all previous groundwater monitoring events are included in **Appendix A, Groundwater Analytical Data**.

3.4.2 Historical Groundwater Flow

Groundwater level monitoring was initiated with background sampling in December 2017, before Ash Pond closure and dewatering was complete. Groundwater elevation contours between December 2017 and December 2018 displayed a radial pattern of groundwater flow away from the Site. Groundwater flow interpretations suggest flow to the north, south, east, and west from this mound. Thus, wells around the periphery of the pond are all classified as downgradient.

Between December 2018 and February 2019, as the pond was dewatered, the radial groundwater flow pattern appeared to diminish, exhibiting a more north-to-south groundwater flow pattern. The observed change in flow pattern likely represents groundwater flow returning to pre-pond conditions as the hydraulic influence of the pond was eliminated by closure and dewatering.

A less prominent groundwater mound was observed just to the north of the Site during the August 2019 August 2020, and October 2021 sampling events and appears to form a localized groundwater divide where groundwater flow bifurcates to the north (north of the divide) or to the south (south of the divide). The groundwater divide appears to be centered approximately 120 feet north of the Ash Pond, indicating north to south flow across the Ash Pond. This groundwater flow divide appears to be seasonal or temporary with occurrences during drier periods. Tables summarizing groundwater elevations from all groundwater monitoring events are included in **Appendix B, Historical Groundwater Elevations Summary**.

3.4.3 Monitoring Variance

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

1. Retains boron as an Appendix III detection monitoring parameter and excludes it as an Appendix IV assessment monitoring parameter.

2. Authorizes the use of Federally-published GWPS of 0.006 milligrams per liter (mg/L) for cobalt, 0.015 mg/L for lead, 0.040 mg/L for lithium, and 0.100 mg/L for molybdenum in lieu of background where those levels are greater than background levels.

3.5 GROUNDWATER SAMPLING AND ANALYSIS

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

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

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

3.5.1 Groundwater Sample Collection

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

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

- 0.2 standard units for pH.
- 5% for specific conductance.

- 0.2 mg/L or 10% for DO > 0.5 mg/l (whichever is greater).
- Turbidity measurements less than 10 NTU.
- Temperature and ORP – record only, no stabilization criteria.

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

3.5.2 Sample Preservation and Handling

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

3.5.3 Chain of Custody

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

3.5.4 Laboratory Analysis

Laboratory analyses were performed by the APC Environmental Laboratory (APCEL) in Calera, Alabama and Pace Analytical Services, LLC (Pace). Each of these labs are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed**. Table 2, Monitoring Parameters and Reporting Limits**, lists Assessment Monitoring constituents analyzed from site groundwater samples. Laboratory reports for the monitoring periods are presented in **Appendix C**.

3.5.5 Monitoring Period Sampling Events Summary

As required by § 257.90(e) and ADEM Admin. Code r. 335-13-15-.06(1)(f), the following describes monitoring-related activities performed during the first semi-annual Assessment Monitoring sampling event that occurred between October 4, 2021 and October 12, 2021. The second semi-annual monitoring

event took place between May 4, 2022, and May 20, 2022. A re-sampling event for combined radium was conducted in between these sampling events due to a potential outlier observed in well GSD-AP-MW-10. This re-sample occurred on January 11, 2022.

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

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

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

4.0 GROUNDWATER DATA EVALUATION

During the October 2021 sampling event, depths to water ranged from 3.02 to 25.74 feet below top of casing (ft BTOC) and groundwater elevations ranged from 530.89 to 508.03 feet above mean seal level (ft NAVD). During the May 2022 sampling event, depths to water ranged from 1.74 to 24.90 ft BTOC, and groundwater elevations ranged from 531.70 to 507.97 ft MSL. An additional comprehensive groundwater gauging event was conducted on January 11, 2022, depths to water ranged from 1.74 to 25.86 ft BTOC, and groundwater elevations ranged from 531.59 to 508.81 ft MSL.

Figure 6A, Potentiometric Surface Contour Map (October 4, 2021), **Figure 6B, Potentiometric Surface Contour Map (January 11, 2022**), and **Figure 6C, Potentiometric Surface Contour Map (May 5, 2022)** depict groundwater elevations and inferred groundwater flow direction from higher elevation to lower. **As shown on Figure 6A,** the seasonal groundwater divide is depicted north of the Ash Pond. Recent monitoring events have shown that this seasonal groundwater divide occurs during fall/dry season monitoring events. The divide during the October 2021 sampling event appears to occur or be centered along or near a straight line between GSD-AP-MW-1 and GSD-AP-MW-4. The area enclosed by the 513-ft contour interval (northeast of the closed Ash Pond) on **Figure 6A** appears to represent an area of groundwater recharge.

As shown on **Figure 6B** and **Figure 6C**, groundwater shows both stronger hydraulic gradients and flow from the northeast towards the Ash Pond during wetter months. The hydraulic gradient tends to increase towards the south which is likely attributable to the presence of the river and the increased presence of lower permeability clays in overburden materials near the river.

Small magnitude vertical gradients were noted between compliance well GSD-AP-MW-2 and corresponding vertical delineation wells GSD-AP-MW-2VA, GSD-AP-MW-2VB, and GSD-AP-MW-21VC which implies that stratigraphic intervals monitored are not confined to a high degree and appear hydraulically connected.

Figures 6A-6C also depict a northeast groundwater flow direction on the opposite side of the Coosa River where upgradient wells are located. The Coosa River forms a groundwater divide separating the upgradient and downgradient flow regimes. Recent groundwater elevation data have been tabulated and are included in **Table 3, Recent Groundwater Elevations Summary.** All available groundwater elevation data recorded since 2017 have been tabulated and included in **Appendix B.**

4.1 GROUNDWATER FLOW VELOCITY CALCULATIONS

Groundwater flow velocity at the Site was calculated based on hydraulic gradients, hydraulic conductivity values derived from slug tests, and an estimated effective porosity of the screened horizon. To date, four slug tests have been analyzed. Based on these analyses, the horizontal hydraulic conductivities for the uppermost aquifer ranges from 2.28 ft/day and 67.75 ft/day, with 67.75 ft/day observed in a more permeable gravel zone. The geometric mean hydraulic conductivity for the Site is 12.33 ft/day. The hydraulic gradient was calculated between well pairs shown in **Appendix D, Horizontal Groundwater Flow Velocity Calculations**. The hydraulic conductivity value used in the calculations is 4.35 x 10-3 cm/sec or 12.33 ft/day and representative of the geometric mean. An estimated effective porosity of 20% is used in the flow rate calculations.

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

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

Where:

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

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

i = Horizontal hydraulic gradient

n_e= Effective porosity

Using this equation, horizontal groundwater flow velocity is calculated for the site flow regime. **Appendix D** presents the estimated horizontal flow velocity calculated using groundwater elevation data from the October 2021 and the May 2022 sampling events.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at an interval of 1 sample per group of 10 well samples. These QA/QC samples include well duplicates, equipment blanks, and field blanks. Routine analyses of field QA/QC samples are a method for evaluating whether artificial bias could have been introduced into lab results by ways of sampling activities or equipment.

5.1 DATA VALIDATION QUALITY ASSURANCE/QUALITY CONTROL

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

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

Where:

RPD = Relative Percent Difference (%)

Conc1 = Higher concentration of the sample or field duplicate

Conc2 = Lower concentration of the sample or field duplicate

Where the relative percent difference is below 20%, the difference is considered acceptable, and no further action is needed. Where an RPD is greater than 20%, further evaluation is required in attempt to determine the cause of the difference and potentially result in qualified data. **Table 4a, Relative Percent Difference Calculations,** provides the relative percent differences for sample and sample duplicates during the first semi-annual sampling event. RPD calculations are only conducted on sets of valid detections as estimated concentrations and non-detects do not provide a reliable base for comparison. All RPDs were below 20% for the October 2021 and May 2022 sampling events.

Analytical data reviewed provided low-level or trace detections in field and or equipment blanks during monitoring period sampling events. **Table 4B, Field QC: Blank Detections** provides a summary of low-

level detections observed during the first semi-annual monitoring event. Each of these detections were estimated concentrations, above the MDL but below the RL, and qualified in the laboratory analytical reports with "J flags." However, if concentrations are detected above the MDL in field QC samples, original results on the (1) date of a blank detection and (2) with a value less than 5 times the field QC detection are flagged with a (+) U* and MDL/RL values modified based upon the blank concentration.

Validated flags do not have an impact on possible statistical analyses due to: (1) low-level concentrations flagged during validation and or (2) constituents flagged are not Site COI. The extent of trace chromium and lead detections in blanks can be explained by low MDL values ranging from 0.00021 to 0.00023 mg/L and 0.00014 mg/L, respectively.

5.2 STATISTICAL METHODOLOGY AND TESTS

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

5.2.1 Appendix III Evaluation

Intrawell prediction limits, combined with a 1-of-2 verification strategy, were constructed for fluoride and pH. Interwell prediction limits, combined with a 1-of-2 verification strategy, are used to evaluate boron, calcium, chloride, sulfate, and TDS. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to identify SSIs.

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

The following adjustments were made:

- No statistical analyses are required on wells and analytes containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).

- When data contain <15% non-detects in the background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data.
- Non-parametric prediction limits are used on data containing greater than 50% non-detects.

5.2.2 Appendix IV Evaluation

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

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

As described in 40 CFR §257.95(h)(1)-(3) and the ADEM Variance (see **Section 3.4.3)**, the GWPS is:

(1) The maximum contaminant level (MCL) established under 40 CFR §§141.62 and 141.66.
(2) Where an MCL has not been established:
    (i) Cobalt 0.006 mg/l.
    (ii) Lead 0.015 mg/l.
    (iii) Lithium 0.040 mg/l.
    (iv) Molybdenum 0.100 mg/l.
(3) Background levels for constituents where the background level is higher than the MCL or rule-specified GWPS.

In assessment monitoring, when the Lower Confidence Limit (LCL), or the entire interval, exceeds the GWPS as discussed in the USEPA Unified Guidance (2009), the result is recorded as an SSL. GWPS for Appendix IV constituents are updated on a biennial schedule. This schedule was initiated in 2019 with updates generally occurring after the second semi-annual sampling event of each biennial year. Data from upgradient wells collected between updates may still be used to support ASDs if merited.

5.3 STATISTICAL EXCEEDANCES

Analytical data from the October 2021 and May 2022 assessment monitoring events were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (April 2019 and revised in August 2020) by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents have returned to background levels. Appendix IV assessment monitoring parameters were evaluated to determine if concentrations statistically exceeded the established groundwater protection standard.

5.3.1 Appendix III Constituents

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

5.3.2 Appendix IV Constituents

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

Statistical analysis of Appendix IV data identified the following SSLs over GWPS at the listed wells during both the first and second semi-annual monitoring events:

- GSD-AP-MW-2: Arsenic.
- GSD-AP-MW-4: Arsenic.

Table 6, First Semi-Annual Monitoring Event Analytical Summary and **Table 7, Second Semi-Annual Monitoring Event Analytical Summary**, provide a summary of all detected constituents for the first and second semi-annual sampling event.

Laboratory analysis initially reported a combined radium (226+228) concentration of 6.52 picocuries per liter (pCi/L) in compliance well GSD-AP-MW-10 exceeding the GWPS of 5 pCi/L during the first 2021 semi-annual sampling event . However, after reanalyzing the sample, Pace revised the reported concentration to 0.778U pCi/L. This is more in-line with historical concentrations were 75% of sampling events have provided "not-detected" and when detected concentrations haver ranged from 0.474 to 0.678 pCi/L.

Additionally, compliance well GSD-AP-MW-10 was resampled on January 11, 2022, for radium and the laboratory analysis reported a combined radium (226+228) concentration to 0.778U pCi/L. The additional radium laboratory report for the monitoring period is presented in **Appendix C**.

Limited groundwater analytical data is available for delineation wells installed at the Site; therefore, groundwater quality is simply compared to the GWPS. A review of analytical data derived from delineation wells revealed the following GWPS exceedances for the first and second semi-annual sampling events (October 2021 and May 2022):

- GSD-AP-MW-2VA: Lithium.
- GSD-AP-MW-2VB: Fluoride, Lithium.
- GSD-AP-MW-21VC: Fluoride, Lithium.
- GSD-AP-MW-22VB: Lithium.

Fluoride was detected at a concentration exceeding the GWPS in newly installed vertical delineation wells GSD-AP-MW-2VB and GSD-AP-MW-21VC. However, it is not being considered as a potential impact from the Ash Pond. Additional discussion is presented in **Section 6.2** outlining rationale for why fluoride is not being considered an impact from the Ash Pond.

To address SSLs at the site, an ACM was prepared to evaluate potential groundwater corrective measures for the occurrence of arsenic and lithium in groundwater at the Site in accordance with § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and ADEM Administrative Order No. 19-104-GW. The ACM was completed on July 10, 2020 and submitted to ADEM and placed on the CCR compliance web site on August 9, 2020. A Groundwater Remedy Selection Report was prepared and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022 for review.

6.0 GROUNDWATER ASSESSMENT AND CORRECTIVE ACTION

As required by Part F of the Order (AO 19-104-GW) and correspondence from ADEM (March 2021), this report provides an update on groundwater delineation activities completed since the submittal of the Facility Plan for Groundwater Investigation (September 30, 2019). The primary purpose of this plan and subsequent phases of work were to identify the horizontal and vertical extent of groundwater impacts defined by the EPA Appendix IV groundwater protection standards.

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in November 2020. The conclusion and results presented indicate that groundwater delineation have been completed to a sufficient degree to define the spatial extent of groundwater impacts and to inform a groundwater remedy selection plan. However, following a review of the March 2021 analytical data, it was determined that additional (Phase III) vertical delineation was necessary to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA and GSD-AP-MW-2VB and further north and northwest in the direction of groundwater flow associated with the seasonal groundwater divide.

6.1 CHRONOLOGY OF DELINEATION ACTIVITIES

Initially, Semi-Annual Progress Reports were to be routinely provided to ADEM in May and November, annually. Alabama Power Company (APC) requested approval to combine information typically provided in the Semi-Annual Progress Reports with Semi-Annual Groundwater Monitoring and Corrective Action Reports on March 15, 2021. ADEM approved this approach and revised timeline for submittals on March 16, 2021. APC will now provide the Department with a discussion of delineation results and corrective action activities in each semi-annual groundwater monitoring and corrective action report (February; August) until released in writing.

6.1.1 Delineation Wells

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

Phase I – Groundwater Investigation (June 2019 – April 2020)

Phase I was conducted between the dates of June 5, 2019 to April 16, 2020. **Table 1b** and **Figure 5** present details and locations of the on-site delineation wells.

The following summarizes all activities that were completed during Phase I of groundwater delineation at the site:

- Installation of three horizontal delineation wells (GSD-AP-MW-18H through GSD-AP-MW-20H) north of compliance wells GSD-AP-MW-2 and GSD-AP-MW-4, and in areas historically interpreted as downgradient of the Ash Pond, between June 5, 2019 and October 24, 2019. Horizontal delineation wells were installed in coarse fractions of water-bearing alluvial deposits or in shallow, weathered intervals of the Conasauga formation.
- Installation of three vertical delineation wells (GSD-AP-MW-2V, GSD-AP-MW-2VA, and GSD-AP-MW-4V) adjacent to monitoring wells GSD-AP-MW-2 and GSD-AP-MW-4. GSD-AP-MW-2 and GSD-AP-MW-4 had historically exhibited elevated concentrations of Appendix IV constituents. Vertical delineation wells targeted more permeable/fractured water-bearing zones within the Conasauga formation in the upper 50 feet of bedrock.
- Vertical delineation well GSD-AP-MW-2VA was installed because the initial attempt (GSD-AP-MW-2V) at vertical delineation proximal to GSD-AP-MW-2 did not yield sufficient groundwater for well development or sampling. As a result, GSD-AP-MW-2V has been converted to a temporary piezometer.
- Successfully developed the three horizontal and two vertical delineation wells between June 25, 2019 and April 14, 2020.
- Sampled the delineation wells between April 13, 2020 and April 16, 2020.
- Submitted a Groundwater Investigation Report to the Department on May 22, 2020. This report recommended a second phase of groundwater investigation to complete delineation of groundwater impacts as required by Part C of the Order.
- Submitted an Assessment of Corrective Measures to the Department on July 10, 2020 as required by Part D of the Order.
- Submitted the 2020 Annual Groundwater Monitoring and Corrective Action Report to document groundwater monitoring activities and results from the August 2019 and April 2020 semi-annual monitoring events on August 1, 2020.

Phase II – Groundwater Investigation – March 2021 to July 2021

Field work for Phase II was conducted during March 2021 and included the installation of an additional, deeper vertical delineation well. GSD-AP-MW-2VB was installed in the vicinity of compliance well GSD-AP-MW-2 and vertical delineation well GSD-AP-MW-2VA to further evaluate the depth of potential impacts. The well was installed, developed, and sampled during the second semi-annual event in March 2021.

Phase III – Groundwater Investigation – August 2021 to Present

Field work for Phase III was conducted between August 2021 October 2021 and included the installation additional vertical delineation wells to further evaluate the depth of potential impacts. The following summarizes all activities that were completed during Phase III of groundwater delineation at the site:

- Installation of one additional vertical delineation well (GSD-AP-MW-2VC) to vertically delineate groundwater impacts at the Site in proximity to the GSD-AP-MW-2, GSD-AP-MW-2VA, and GSD-AP-MW-2VB well locations.

- Installation of two additional vertical delineation well (GSD-AP-MW-21VB and GSD-AP-MW-21VC) to vertically delineate groundwater impacts at the Site to the north of GSD-AP-MW-2, GSD-AP-MW-2VA, and GSD-AP-MW-2VB well locations and in the direction of historical groundwater flow.

- Installation of two additional vertical delineation well (GSD-AP-WW-22VB and GSD-AP-MW-23VB) to vertically delineate groundwater impacts at the Site to the north in the direction of historical groundwater flow.

- Successfully developed and sampled vertical delineation wells GSD-AP-MW-21VC and GSD-AP-WW-22VB. Wells GSD-AP-MW-21VB, GSD-AP-MW-2VC, and GSD-AP-MW-23VB did not yield sufficient groundwater for well development or sampling and have been designated as water level only piezometers.

Phase III delineation field work concluded with the first semi-annual groundwater sampling event in October 2021, and a discussion of the results are included in the following sections.

6.2 DISCUSSION OF DELINEATION RESULTS

Groundwater Monitoring and Corrective Action reports for the Plant Gadsden Ash Pond have historically identified SSLs in groundwater for arsenic and lithium in compliance well GSD-AP-MW-2 and arsenic in compliance well GSD-AP-MW-4. Lithium is no longer an SSL in GSD-AP-MW-2 and recent analytical results have identified only lithium concentrations above GWPS in deeper vertical delineation wells GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-21VC, and GSD-AP-MW-22VB.

However, these new vertical delineation wells are screened in a deeper section of the Conasauga Formation, which has different geochemical characteristics and can introduce new types of variability not observed in shallow site wells. These data are not congruent with the previous conceptual site model (CSM) that

attributes the source of lithium to the ash pond; rather, the data suggest that natural, geogenic sources for lithium may exist. The Conasauga shale/mudstone formation at the Site may be a geogenic source of lithium to deeper groundwater. Among the common rock or sediment types, the highest lithium concentrations occur in shales (average 66 parts per million lithium; USGS 2017), which is more than enough lithium to produce the observed concentrations in deeper groundwater at the Site. Existing monitoring data supporting a natural source includes:

- Geochemical facies consistent with ancient or old water (Sodium Chloride Type)
- Linear increase in lithium concentration as a function of well depth
- Increase in lithium concentration also associated with rock formation
- Higher pH indicating longer residence time and water-rock interactions
- Elevated sodium and fluoride

A geogenic investigation work plan to investigate the potential natural geogenic sources of lithium is currently under development. The geogenic investigation is composed of three major components: (1) determine if lithium is present in bedrock and could be released to groundwater; (2) use of tritium and helium isotopes to determine if deeper groundwater is young enough to be influenced by ash pond water; and (3) determine by various geochemical methods if ash pond water may have impacted deeper groundwater. This approach provides multiple lines of evidence to assess a geogenic source for lithium.

Additionally, with the most recent phase of groundwater investigation and assessment monitoring, fluoride exceedances were observed in vertical delineation wells GSD-AP-MW-2VB and GSD-AP-MW-21VC during both the first and second semi-annual sampling events. However, it is not being considered as a potential impact from the Ash Pond. The reasons for this determination are date driven: (1) fluoride impacts have not been observed historically in the uppermost aquifer or other site delineation wells (including paired locations GSD-AP-MW-2, GSD-AP-MW-2VA) and (2) GSD-AP-MW-2VB and GSD-AP-MW-21VC are new wells, screened in a deeper section of the Conasauga Formation, which has different geochemical characteristics and can introduce new types of variability not observed in shallow site wells. Groundwater quality obtained from recently installed wells also have the potential to provide (temporary) unrepresentative results as the physical processes utilized during the boring and well installation process can disrupt equilibrium conditions for months to years.

Isoconcentration maps for arsenic and lithium are presented in **Figure 7 Arsenic Isoconcentrations Map (May 2022)** and **Figure 8 Lithim Isoconcentrations Map (May 2022)**, respectively. Geologic profiles depicting arsenic and lithium concentrations in cross-section are presented in **Figure 9 Arsenic**

Concentrations along Geologic Profile A-A' and **Figure 10 Lithium Concentrations along Geologic Profile A-A'** respectively. **Tables 6** and **7** identify Appendix IV constituents in delineation wells with concentrations above GWPS.

Isoconcentration lines shown on **Figures 7** and **8** are data-driven contours derived from the spatial distribution of constituent concentrations in the well network. When spatially distributed objects are spatially correlated (objects close to together have similar characteristics) interpolation analysis can be used to predict "unknowns" between objects. ArcGIS and geostatistical analyst are utilized to interpolate chemical concentrations between well locations. This process involves the transformation of chemical concentration data to log-normal distribution prior to interpolation. In cases where concentrations decrease below the GWPS in between well pairs, the extent of groundwater impacts are interpreted from the interpolated (predicted) data set. This method takes into account the spatial pattern of decreasing concentrations observed in nearby wells.

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

1. Determine if impacts to groundwater could extend off-site in the direction of groundwater flow away from the facility.
2. Evaluate potential for vertical migration adjacent to compliance wells with SSLs and within the context of site hydrogeology.
3. Address key data gaps between phases – working in from property line or off-site depending on gaps.
4. Ability to safely access locations with drill rig and supporting equipment.
5. Occurrence of groundwater and sufficient groundwater yield/recharge at locations.
6. Delineate extent of impacts and capture additional hydrogeologic data necessary to evaluate the feasibility of groundwater remediation technologies.

As shown on **Table 1b**, nine delineation wells have been installed at the site to assess potential impacts. Additionally, as shown on **Table 1c,** four delineation wells were installed but did not produce sufficient water to sample and were designated as water-level only piezometers.

6.2.1 Arsenic Delineation

As shown on **Figures 7** and **9** arsenic impacts to groundwater include two compliance wells GSD-AP-MW-2 and GSD-AP-MW-4. Phase I groundwater delineation activities were executed to continue the investigation of impacts to groundwater at Plant Gadsden and delineation wells were installed to define the

horizontal and vertical extent of Appendix IV exceedances. In addition, existing downgradient piezometers GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6 were also sampled and utilized in delineation of Appendix IV exceedances.

Arsenic concentrations in well GSD-AP-MW-2 have declined since October 2018 and the completion of ash pond closure. From October 2018 to the most recent sampling event, arsenic concentrations in well Arsenic concentrations in compliance well GSD-AP-MW-2 fluctuate seasonally but exhibit an overall decrease from 1.01 mg/L in August 2019 to 0.424 mg/L in October 2021 to 0.569 mg/L in May 2022.

This decreasing trend appears related to increasing ORP and decreasing TDS which are indicative of the continued re-establishment of natural hydraulic conditions post-closure. As previously mentioned, this positive trend has also followed a decreasing lithium concentration trend which has decreased to below the GWPS in well GSD-AP-MW-2.

Compliance well GSD-AP-MW-4 has displayed a consistent or overall flat trend since sampling began in 2017. However, arsenic concentrations in well GSD-AP-MW-4 demonstrate a distinctive seasonal overprint pattern of higher concentrations in Fall/Winter sampling events and lower concentrations in spring sampling events. The magnitude of these seasonal trends is small with variations typically around 0.001 to 0.002 mg/L or presented differently, concentration variations of 9-11% between events. It should be noted that the average concentration (0.0127 mg/L) is just above the GWPS (0.01 mg/L). While arsenic does not show a decreasing trend, boron in well GSD-AP-MW-4, has shown a decreasing trend from 0.510 to 0.342 mg/L between December 2018 and the most recent sampling event. This indicates that throughout this period pond closure activities have had a positive impact on limiting CCR sources of COI and reducing concentrations overall. Arsenic concentrations and fluctuations in GSD-AP-MW-4 likely represent a geochemical dynamic of sorption and desorption from aquifer minerals.

Arsenic concentrations have not been detected above GWPS in horizontal delineation wells GSD-AP-MW-18H, GSD-AP-MW-19H, and GSD-AP-MW-20H or vertical delineation wells GSD-AP-MW-2VA and GSD-AP-MW-4V installed north of compliance wells GSD-AP-MW-2 and GSD-AP-MW-4 which are areas historically interpreted as downgradient of the Ash Pond. Vertical delineation wells targeted more permeable/fractured water-bearing zones within Conasauga Formation bedrock in the upper 50 feet of bedrock. Vertical delineation well GSD-AP-MW-2VA was installed because the initial attempt (GSD-AP-MW-2V) at vertical delineation proximal to GSD-AP-MW-2 did not yield sufficient groundwater for well development. As a result, GSD-AP-MW-2V has been converted to a temporary piezometer. Phase II and Phase III vertical delineation wells were installed to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2 and GSD-AP-MW-2VA and further north and northwest in the direction of

groundwater flow associated with the seasonal groundwater divide. Arsenic concentrations have not been detected above GWPS in Phase II or III vertical delineation wells GSD-AP-MW-2VB, GSD-AP-MW-21VC, or GSD-AP-MW-22VB. As shown on **Figures 7** and **9**, analytical results for arsenic in horizontal and vertical delineation wells have been below GWPS and is sufficiently delineated laterally and vertically at the Site.

6.2.2 Lithium Delineation

Phase I and II of groundwater delineation also explored the extent of potential lithium impacts to groundwater in the vicinity of GSD-AP-MW-2. Analytical results from horizontal delineation wells have been below the GWPS for lithium as shown on **Figures 8** and **10**.

As described previously, the results from existing compliance wells installed near the northern waste boundary (GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6) supplement delineation efforts to the north. These wells continued to be non-detect for lithium and thus, provide no indications of off-site migration.

Vertical delineation results obtained from GSD-AP-MW-2VA showed lithium concentrations above GWPS during the August 2020 sampling event with concentrations increasing with depth from MW-2 to MW-2VA. Additionally, an upward hydraulic gradient was noted at the well pair GSD-AP-MW-2 and GSD-AP-MW-2VA where groundwater appeared to be flowing from deeper intervals towards the shallow water table. To continue vertical delineation, a second deeper vertical delineation well, GSD-AP-MW-2VB, was installed to further assess groundwater conditions in the vicinity of compliance well GSD-AP-MW-2. Results from the recent May 2022 sampling event continue to indicate increased lithium concentrations with depth. The lithium concentration exhibited in vertical delineation well GSD-AP-MW-2VB was approximately twice the concentration exhibited in vertical delineation well GSD-AP-MW-2VA, and over four times the concentration exhibited in the shallow compliance well GSD-AP-MW-2. Additional vertical delineation wells were installed to further evaluate lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA, and GSD-AP-MW-2VB further north and northwest in the direction of groundwater flow. Two vertical delineation wells GSD-AP-MW-21VC and GSD-AP-MW-22VB exhibited lithium concentrations of above GWPS during the first semi-annual (October 2021) and second semi-annual (May 2022) sampling events continuing to indicate increased lithium concentrations with depth.

Lithium concentrations in compliance well GSD-AP-MW-2 remained below the GWPS for the third time during the May 2022 sampling event and is no longer an SSL. The decreasing lithium concentration trend

in GSD-AP-MW-2 began between October 2018 and February 2019, which correlates exactly with the timing and disappearance of the radial flow pattern described in **Section 3.2.2**

6.3 STATUS OF DELINEATION

A comprehensive groundwater delineation report summarizing findings was submitted to ADEM in November 2020. The conclusion and results presented indicate that groundwater delineation have been completed to a sufficient degree to define the spatial extent of groundwater impacts and to inform a groundwater remedy selection plan. However, following a review of the March 2021 analytical data, it was determined that additional (Phase III) vertical delineation was necessary to further evaluate the spatial extent of lithium around wells GSD-AP-MW-2, GSD-AP-MW-2VA and GSD-AP-MW-2VB and further north and northwest in the direction of groundwater flow associated with the seasonal groundwater divide.

As presented in **Section 6.2**, the horizontal and vertical extent of arsenic impacts have been successfully delineated, and no future actions are planned. Lithium impacts appear to be delineated laterally but are not yet fully delineated in the vertical sense. Additional sampling and geochemical analyses will be performed to evaluate groundwater quality in deep rock intervals where constituents and concentrations may vary from the more-shallow monitoring network naturally.

6.4 GROUNDWATER QUALITY CHANGES AND TRENDS

Important groundwater quality changes or trends have been noted in **Section 6.2**. The key findings include:

- Arsenic concentrations exceeding GWPS are limited to two compliance wells GSD-AP-MW-2 and GSD-AP-MW-4. Arsenic has been delineated laterally and vertically.
- Arsenic concentrations in compliance well GSD-AP-MW-2 fluctuate seasonally but exhibit an overall decrease from 1.01 mg/L in August 2019 to 0.424 mg/L in October 2021 to 0.569 mg/L in May 2022.
- Arsenic concentrations in compliance well GSD-AP-MW-4 historically have exhibited a trend of fluctuating concentrations of just slightly above GWPS with an average concentration of 0.0127 mg/L.
- Lithium concentrations in compliance well GSD-AP-MW-2 have dropped below GWPS during the last three sampling events in March 2021, October 202, and May 2022 and is no longer an SSL.
- Recent analytical results have identified only lithium concentrations above GWPS in deeper vertical delineation wells GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-21VC, and GSD-AP-MW-22VB. A geogenic investigation will be performed to evaluate groundwater quality in deep rock

intervals where constituents and concentrations may vary from the more-shallow monitoring network naturally.

7.0 GROUNDWATER REMEDY AND CORRECTIVE ACTION

An Assessment of Corrective Measures (ACM) for groundwater impacts was conducted and formally submitted to ADEM in July 2020. Additional data analyses and investigations conducted since the ACM culminated with a more detailed Groundwater Remedy Selection Report, submitted in October 2021, and a Corrective Action Groundwater Monitoring Program document submitted in January 2022.

Submittal	Submittal Date	Purpose
Assessment of Corrective Measures	07/2020	Initial evaluation of the feasibility, performance, and implementation of known and emerging groundwater remediation technologies against site conditions and factors.
Groundwater Remedy Selection Report	10/2021	Formal selection and detailed description of groundwater remedies selected for implementation at the site.
Corrective Action Groundwater Monitoring Program	01/2022	Plan document to describe process and program for implementation and monitoring of groundwater remedies selected at the site.

7.1 GROUNDWATER REMEDY SELECTION

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

- Source control (complete) that included dewatering, consolidation, capping of the Site.
- Geochemical manipulation via injections in areas of relatively high concentrations of constituents of interest (COI) to remove them from groundwater and immobilize them in situ.
- Monitored natural attenuation (MNA) over the entire Site.

Closure of the Site, which included dewatering, consolidation, and capping, has reduced source contributions to groundwater. Geochemical manipulation via injections was selected because of its effectiveness, ease of implementation, versatility (ability to treat more than one COI with the same treatment solution), ability to implement in areas with limited working space, and lack of byproducts that

would require further treatment or disposal. MNA was selected because substantial evidence indicates that it is currently occurring at the Site.

7.2 CORRECTIVE ACTION – GROUNDWATER MONITORING PROGRAM

The Corrective Action Groundwater Monitoring Program describes early plans for implementation and monitoring of groundwater remedies described above. As discussed in the Groundwater Remedy Selection Report (Anchor QEA 2021), construction activities associated with closure reached substantial completion in August 2018. Site closure included removal of free water, dewatering the CCR material, grading the Site to promote drainage, and installing a final cover consisting of a low-permeability cover system consisting of synthetic turf and geomembrane. The final cover was constructed over the consolidated footprint of the CCR unit, which has an area of approximately 55 acres.

In addition to continued rule-required assessment monitoring, the objectives of this Monitoring Program are to demonstrate that horizontal and vertical delineation remain complete, demonstrate that natural attenuation is occurring, evaluate groundwater remedy performance against groundwater protection standards, evaluate groundwater constituent of interest concentrations with respect to standards protective of potential human and ecological receptors, and evaluate system performance against adaptive triggers to determine if adaptation or change to the remedy system is necessary.

For the first 2 years (2022 through 2024), background (in time) monitoring will be conducted to establish post-closure baseline Site conditions with respect to MNA parameters. After the 2-year period, the baseline data will be evaluated, and subsequent adjustments to the Monitoring Program may be implemented. Specific adaptive triggers for MNA monitoring will also be developed after the initial 2-year background monitoring.

MNA and source control (Site closure) will operate in conjunction with each other as remedies. Site closure appears to be reducing source contributions of COIs to groundwater. Geochemical manipulation via injections will be implemented after completion of successful laboratory treatability studies, issuance of an underground injection control permit, and installation of injection and additional monitoring wells associated with the injection areas. The following tasks outline the first phase of the of implementation and monitoring of selected groundwater remedies.

Selected Remedy	Implementation Task(s)
Monitored Natural Attenuation	1. Implementation of expanded MNA sampling parameters. 2. Further assessment of MNA monitoring network.
Geochemical Injection	1. Complete laboratory treatability studies to evaluate reagent composition, dosing, effectiveness, and sequencing for in situ groundwater treatment of constituents of interest (COIs) via injection. Results from the treatability studies would be incorporated into an Underground Injection Control (UIC) permit application for the Site. 2. Implementation of geochemical injection pilot tests using data collected from the laboratory treatability studies and issuance of an UIC permit.

Implementation of Monitored Natural Attenuation

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

Geochemical Injection Pilot Testing Program

Laboratory treatability studies using Site aquifer media and impacted groundwater to evaluate reagent composition, dosing, effectiveness, and sequencing (if applicable) for in situ groundwater treatment of COIs via injection is currently being conducted. The Laboratory Treatability Study Work Plan is presented in

Appendix F. Treatability tests include the following tasks and procedures prior to field implementation of an injection treatment pilot study.

- Selection and formulation of reagent solutions based on previous similar studies.
- Batch testing using multiple treatment solutions to determine the most effective formulations to carry forward to column testing.
- Column testing to better simulate field conditions, determine effectiveness, and evaluate potential release of COIs due to treatment (unintended consequences).
- Post-column testing, using selective sequential extraction, on treated soils to determine the long-term stability of the accumulated COIs.
- Results from the treatability studies would be incorporated into an Underground Injection Control permit application to be submitted to ADEM for approval prior to field implementation of an injection treatment pilot study.

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

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

8.0 SUMMARY AND CONCLUSIONS

Semi-annual assessment monitoring events were conducted in October 2021 and May 2022. Statistical evaluations of the first (October 2021) and second (May 2022) assessment monitoring data identified SSLs of the Appendix IV constituent arsenic above the GWPS. To address previously identified SSLs, a Groundwater Remedy Selection Report was prepared and submitted to ADEM on October 29, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on January 27, 2022 for review.

The Corrective Action Groundwater Monitoring Program was prepared to detect potential downgradient changes in groundwater quality and assess the efficacy of the selected groundwater corrective action remedies. The Monitoring Program will supplement the ongoing CCR compliance groundwater monitoring currently being performed at the Site. The following future actions will be taken or are recommended for the site:

- Conduct batch testing to evaluate removal of COIs, and selection of the optimum reagents and doses for column tests.
- Conduct column testing to evaluate removal of COIs by mixing treatment reagents with site-specific impacted groundwater and applying to site-specific soils (aquifer solids) in columns; Appendix III and IV constituents will be measured in the column effluents to determine the reduction of COIs in groundwater, and to evaluate any unintended consequences of treatment.
- Conduct selective sequential extraction of post-column (treated) soils to help determine the sequestration mechanisms and stability of the COIs and their host solids.
- After treatment, the post-column (treated) soils will be leached with upgradient (background) groundwater from the respective plant in additional column studies, to help assess long-term stability of the COIs and their host solids.
- Prepare Class V UIC permit.
- Prepare and implement a geogenic investigation work plan to evaluate if Site bedrock (Conasauga shale/mudstone) may be a geogenic source of lithium to deeper groundwater in recently installed vertical delineation wells that exhibit increasing lithium concentrations with depth.
- Conduct the first semi-annual assessment monitoring event in the fall of 2022 and submit the annual groundwater monitoring and corrective action report summarizing the findings to ADEM by February 1, 2023.

9.0 REFERENCES

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Tables

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GSD-AP-MW-14	Upgradient	Alluvium	34.01101	-85.96841	545.49	548.34	32.8	525.90	515.90	10	3/27/2018
GSD-AP-MW-16	Upgradient	Alluvium	34.01086	-85.96891	553.08	555.83	36.2	530.00	520.00	10	9/20/2018
GSD-AP-MW-17	Upgradient	Alluvium	34.01036	-85.96866	546.88	550.11	62.8	497.73	487.73	10	9/24/2018
GSD-AP-MW-10	Downgradient	Alluvium	34.01752	-85.97338	527.70	530.91	48.4	492.89	482.89	10	8/3/2017
GSD-AP-MW-11	Downgradient	Alluvium	34.01615	-85.97171	514.18	517.01	34.0	493.41	483.41	10	7/17/2013
GSD-AP-MW-12	Downgradient	Alluvium	34.01662	-85.96922	518.73	521.82	31.8	500.47	490.47	10	7/17/2013
GSD-AP-MW-1	Downgradient	Alluvium	34.01809	-85.96893	523.48	526.37	27.8	508.98	498.98	10	8/8/2017
GSD-AP-MW-2	Downgradient	Alluvium	34.01929	-85.97051	523.04	526.16	28.2	508.39	498.39	10	8/10/2017
GSD-AP-MW-3	Downgradient	Alluvium	34.02036	-85.97215	523.68	526.80	27.5	509.75	499.75	10	8/11/2017
GSD-AP-MW-4	Downgradient	Alluvium	34.02107	-85.97287	517.27	520.60	26.3	504.73	494.73	10	7/15/2013
GSD-AP-MW-5	Downgradient	Alluvium	34.02208	-85.97386	513.26	516.27	26.9	499.79	489.79	10	8/15/2017
GSD-AP-MW-6	Downgradient	Alluvium	34.02311	-85.9759	512.09	515.23	26.3	499.38	489.38	10	8/3/2017
GSD-AP-MW-7	Downgradient	Alluvium	34.02142	-85.97702	517.05	519.86	30.3	499.96	489.96	10	7/16/2013
GSD-AP-MW-8	Downgradient	Alluvium	34.01903	-85.97735	516.02	519.22	32.7	496.94	486.94	10	8/2/2017
GSD-AP-MW-9	Downgradient	Alluvium	34.01809	-85.97538	517.41	520.36	35.2	495.57	485.57	10	7/16/2013
GSD-AP-PZ-1	Downgradient	Alluvium	34.02224	-85.97234	518.80	521.64	27.5	504.57	494.57	10	8/14/2017
GSD-AP-PZ-2	Downgradient	Alluvium	34.02369	-85.97598	513.46	516.49	23.9	502.95	492.95	10	8/16/2017
GSD-AP-PZ-5	Downgradient	Alluvium	34.0209	-85.9692	521.36	524.26	30.8	503.89	493.89	10	3/28/2018
GSD-AP-PZ-6	Downgradient	Alluvium	34.02082	-85.97066	516.69	519.60	22.4	507.65	497.65	10	3/28/2018

Notes:
ft = feet; ft NAVD = elevation in feet, referenced to North American Vertical Datum; ft BTOC = depth, referenced in feet below top of casing
(1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.
(2) Vertical elevations are in feet relative to the North American Vertical Datum (NAVD)1988.
(3) Total well depth accounts for sump if data provided on well construction logs.

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GSD-AP-MW-2VA	Vertical Delineation	Conasauga Formation	34.01938	-85.97044	521.54	524.94	78.6	456.79	446.79	10	1/30/2020
GSD-AP-MW-2VB	Vertical Delineation	Conasauga Formation	34.01951	-85.97042	519.74	522.56	105.5	427.44	417.44	10	3/6/2021
GSD-AP-MW-4V	Vertical Delineation	Conasauga Formation	34.02103	-85.97282	517.56	520.33	44.8	485.98	475.98	10	10/22/2019
GSD-AP-MW-21VC	Vertical Delineation	Conasauga - Knox Contact (Fault Zone)	34.01962	-85.97032	519.00	521.13	157.6	373.90	363.90	10	8/24/2021
GSD-AP-MW-22VB	Vertical Delineation	Conasauga - Knox Contact (Fault Zone)	34.02005	-85.97023	515.48	518.01	52.6	475.81	465.81	10	8/27/2021
GSD-AP-MW-18H	Horizontal Delineation	Alluvium	34.01929	-85.96866	522.28	524.45	27.6	507.25	497.25	10	10/24/2019
GSD-AP-MW-19H	Horizontal Delineation	Alluvium	34.02013	-85.97054	513.95	517.32	22.1	505.64	495.64	10	10/24/2019
GSD-AP-MW-20H	Horizontal Delineation	Alluvium	34.02113	-85.97273	514.28	516.68	20.3	506.79	496.79	10	10/24/2019

Notes:

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

(1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.

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

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

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

Well ID	Hydraulic Location	Geologic Unit	Latitude	Longitude	Ground Surface Elevation (ft NAVD)	Top Of Casing Elevation (ft NAVD)	Well Depth (ft BTOC)	Top Of Screen Elevation (ft NAVD)	Bottom Of Screen Elevation (ft NAVD)	Screen Length (ft)	Date Of Installation
WELL NETWORK											
GSD-AP-MW-2V	Piezometer	Conasauga Formation	34.01932	-85.97048	522.90	525.31	62.4	473.31	463.31	10	10/24/2019
GSD-AP-MW-2VC	Piezometer	Conasauga Formation	34.01945	-85.9705	520.45	522.87	139.9	427.44	417.44	10	8/22/2021
GSD-AP-MW-21VB	Piezometer	Conasauga - Knox Contact (Fault Zone)	34.01969	-85.97025	517.72	520.24	105.4	425.28	415.28	10	8/26/2021
GSD-AP-MW-23VB	Piezometer	Conasauga - Knox Contact (Fault Zone)	34.0208	-85.97068	516.58	519.03	102.7	426.70	416.70	10	8/30/2021

Notes:

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

(1) Coordinates have been transformed into WGS84 from NAD 27/83, State Plane, Alabama, feet.

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

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

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Table 2. Parameters And Reporting Limits

Plant Gadsden Ash Pond
05/09/2022 - 05/17/2022

Appendix III Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	0.406-4.06	mg/L
Chloride	SM4500Cl E	1-10	mg/L
Fluoride	SM4500F G 2017	0.125-0.5	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	2-50	mg/L
TDS	NA	NA	mg/L
Appendix IV Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Antimony	EPA 200.8	0.001015	mg/L
Arsenic	EPA 200.8	0.000203	mg/L
Barium	EPA 200.8	0.001015	mg/L
Beryllium	EPA 200.8	0.001015	mg/L
Cadmium	EPA 200.8	0.000203	mg/L
Chromium	EPA 200.8	0.001015	mg/L
Cobalt	EPA 200.8	0.000203	mg/L
Fluoride	SM4500F G 2017	0.125-0.5	mg/L
Lead	EPA 200.8	0.000203	mg/L
Lithium	EPA 200.7	0.02	mg/L
Mercury	EPA 245.1	0.0005	mg/L
Molybdenum	EPA 200.8	0.000203	mg/L
Selenium	EPA 200.8	0.001015	mg/L
Thallium	EPA 200.8	0.000203	mg/L
Combined Radium 226 + 228	Total Radium Calculation	NA	pCi/L

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

Table 3.
Recent Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)										
		1/3/2019	2/4/2019	2/25/2019	6/10/2019	8/19/2019	4/13/2020	8/24/2020	3/15/2021	10/4/2021	1/11/2022	5/5/2022
GSD-AP-MW-1	526.37	--	517.76	519.26	514.50	511.97	517.91	512.36	516.98	513.76	515.65	516.18
GSD-AP-MW-2	526.16	--	516.64	518.15	514.30	512.01	516.67	512.37	516.10	513.65	515.05	515.54
GSD-AP-MW-3	526.80	--	515.98	517.38	514.21	512.03	516.42	512.48	515.58	513.71	515.01	515.04
GSD-AP-MW-4	520.60	--	515.78	517.13	514.13	512.00	515.99	512.57	515.40	513.70	515.01	514.94
GSD-AP-MW-5	516.27	--	512.09	513.01	511.13	508.72	512.38	510.36	511.63	511.16	514.84	514.81
GSD-AP-MW-6	515.23	--	510.70	511.64	510.02	507.89	511.28	509.81	510.32	510.19	512.26	511.48
GSD-AP-MW-7	519.86	--	509.82	513.85	508.34	506.95	510.09	507.64	508.87	508.25	510.72	510.16
GSD-AP-MW-8	519.22	--	508.46	511.45	507.78	507.62	509.16	507.98	507.18	508.03	509.84	508.75
GSD-AP-MW-9	520.36	--	508.46	511.42	507.83	507.61	508.71	508.06	507.19	508.06	508.01	507.97
GSD-AP-MW-10	530.91	--	509.93	511.87	509.34	508.74	509.73	509.13	508.82	509.19	508.04	507.98
GSD-AP-MW-11	517.01	--	509.06	511.67	508.12	507.59	509.18	507.99	507.92	508.29	509.67	509.05
GSD-AP-MW-12	521.82	--	514.11	515.43	511.29	508.94	514.20	509.66	513.06	511.21	508.88	508.32
GSD-AP-MW-14	548.34	--	527.65	528.71	527.07	526.25	528.26	526.07	527.24	526.85	513.49	512.20
GSD-AP-MW-16	555.83	530.52	531.32	531.98	530.55	529.71	531.91	529.60	530.64	530.09	526.75	527.40
GSD-AP-MW-17	550.11	532.49	532.25	534.03	531.23	530.30	532.80	530.65	531.68	530.89	529.97	530.93
GSD-AP-PZ-1	521.64	--	517.29	519.05	513.54	510.14	517.30	510.78	516.46	513.04	513.88	515.45
GSD-AP-PZ-2	516.49	--	509.02	511.33	508.15	507.31	509.12	508.13	507.85	508.33	508.98	508.25
GSD-AP-PZ-5	524.26	--	517.72	519.28	513.81	510.37	518.21	511.00	516.90	513.14	521.34	515.92
GSD-AP-PZ-6	519.60	--	517.43	518.72	513.82	510.30	517.75	510.99	516.73	513.18	517.86	515.77
GSD-AP-MW-4V	520.33	--	--	--	--	--	516.09	512.39	515.31	513.51	517.86	515.77
GSD-AP-MW-18H	524.45	--	--	--	--	--	518.59	511.07	517.02	513.14	516.86	516.01
GSD-AP-MW-19H	517.32	--	--	--	--	--	516.97	511.36	516.29	513.21	NM	515.58
GSD-AP-MW-20H	516.68	--	--	--	--	--	516.28	512.47	515.39	513.66	511.40	514.90
GSD-AP-MW-2V	525.31	--	--	--	--	--	516.60	512.43	516.13	516.13	515.11	515.54
GSD-AP-MW-2VA	524.94	--	--	--	--	--	519.33	512.43	516.13	516.13	515.14	515.56
GSD-AP-MW-2VB	522.56	--	--	--	--	--	--	--	516.15	516.15	515.07	515.59
GSD-AP-MW-2VC[5]	522.87	--	--	--	--	--	--	--	--	483.16	515.05	515.84
GSD-AP-MW-21VB[5]	520.24	--	--	--	--	--	--	--	--	467.53	513.83	515.61
GSD-AP-MW-21VC	521.13	--	--	--	--	--	--	--	--	513.09	513.31	515.83
GSD-AP-MW-22VB	518.01	--	--	--	--	--	--	--	--	513.30	516.24	515.68
GSD-AP-MW-23VB[5]	519.03	--	--	--	--	--	--	--	--	510.42	515.79	515.92

Notes:

1. ft. AMSL - feet above mean sea level

2. -- Not Measured

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Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

GSD-AP-MW-14				
Sample Date = 10/12/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	11.8	11.8	0.00%
Chloride	mg/L	2.87	2.89	0.69%
Sulfate	mg/L	95.7	88.9	7.37%
TDS	mg/L	142	132	7.30%
Arsenic	mg/L	0.00131	0.00137	4.48%
Barium	mg/L	0.0268	0.0286	6.50%
Beryllium	mg/L	0.00115	0.00117	1.72%
Cadmium	mg/L	0.00059	0.00051	15.02%
Cobalt	mg/L	0.0291	0.0288	1.04%
Lead	mg/L	0.00156	0.00151	3.26%
Selenium	mg/L	0.00287	0.00291	1.38%
GSD-AP-MW-4				
Sample Date = 10/5/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.344	0.347	0.87%
Calcium	mg/L	27.4	27.8	1.45%
Chloride	mg/L	9.3	9.83	5.54%
Fluoride	mg/L	0.214	0.205	4.30%
Sulfate	mg/L	37.8	36.9	2.41%
TDS	mg/L	200	197	1.51%
Arsenic	mg/L	0.0147	0.0148	0.68%
Barium	mg/L	0.202	0.208	2.93%
Cobalt	mg/L	0.0238	0.0236	0.84%
Molybdenum	mg/L	0.00111	0.00109	1.82%
GSD-AP-MW-5				
Sample Date = 10/5/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.26	0.26	0.00%
Calcium	mg/L	36	35.9	0.28%
Chloride	mg/L	6.78	6.84	0.88%
Fluoride	mg/L	0.122	0.104	15.93%
Sulfate	mg/L	14.4	14.5	0.69%
TDS	mg/L	168	180	6.90%
Barium	mg/L	0.221	0.229	3.56%

Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

GSD-AP-MW-5				
Sample Date = 10/5/2021				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Cobalt	mg/L	0.00116	0.00108	7.14%

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

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Table 4a. Relative Percent Difference (RPD) Calculations

Plant Gadsden Ash Pond
05/10/2022 - 05/16/2022

GSD-AP-MW-19H				
Sample Date = 5/16/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.336	0.334	0.60%
Calcium	mg/L	26.9	28.3	5.07%
Chloride	mg/L	7.23	7.1	1.81%
Sulfate	mg/L	60.2	59.1	1.84%
Barium	mg/L	0.124	0.124	0.00%
Cobalt	mg/L	0.00485	0.00496	2.24%
GSD-AP-MW-1				
Sample Date = 5/10/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Boron	mg/L	0.954	0.943	1.16%
Calcium	mg/L	166	164	1.21%
Chloride	mg/L	5.97	5.94	0.50%
Sulfate	mg/L	508	508	0.00%
Arsenic	mg/L	0.00221	0.00202	8.98%
Barium	mg/L	0.0275	0.0284	3.22%
Cadmium	mg/L	0.00022	0.00022	0.46%
Cobalt	mg/L	0.0136	0.0137	0.73%
GSD-AP-MW-6				
Sample Date = 5/10/2022				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	10.8	10.7	0.93%
Chloride	mg/L	8.87	8.84	0.34%
Sulfate	mg/L	14.8	14.7	0.68%
Barium	mg/L	0.0762	0.0755	0.92%
Cobalt	mg/L	0.00114	0.00109	4.48%

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

Table 4b. - Field QC: Blank Detections

Plant Gadsden Ash Pond
05/09/2022 - 05/17/2022

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
05/17/2022	EB-1	Chromium	0.00022 J	mg/L	0.0002
05/16/2022	FB-3	Chromium	0.00021 J	mg/L	0.0002

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

Table 4b. - Field QC: Blank Detections

Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

Parameters Detected Above MDL					
Sample Date	**QC Location**	**Parameter**	**Blank Concentration**	**Units**	**MDL**
10/06/2021	FB-2	Chromium	0.00023 J	mg/L	0.0002
10/05/2021	EB-2	Chromium	0.00021 J	mg/L	0.0002
10/05/2021	FB-1	Lead	0.00014 J	mg/L	7E-05

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

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Table 5. Summary of Background Levels and Groundwater Protection Standards

Plant Gadsden Ash Pond

Appendix IV Analytes			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00108	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0563	0.0563
Fluoride	mg/L	0.2363	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002
Combined Radium 226 + 228	pCi/L	1.589	5

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

Field Parameters								
Hydraulic Location	Well	Sample Date	Conductivity uS/cm	DO mg/L	ORP mv	pH_Field SU	Field Temperature C	Turbidity NTU
Upgradient	GSD-AP-MW-14	10/12/2021	276.99	4.54	167.2	4.04	19.12	2.99
Upgradient	GSD-AP-MW-16	10/06/2021	272.73	4.12	164.32	4.16	19.55	3.19
Upgradient	GSD-AP-MW-17	10/06/2021	317.65	0.64	79.35	7.92	20.5	8.25
Downgradient	GSD-AP-MW-1	10/05/2021	1200.42	0.16	104.55	5.79	18.8	2.76
Downgradient	GSD-AP-MW-10	10/11/2021	371.08	0.43	-56.1	6.72	20.11	2.95
Downgradient	GSD-AP-MW-11	10/12/2021	577.54	0.21	18.62	6.66	19.95	7.01
Downgradient	GSD-AP-MW-12	10/05/2021	510.48	0.14	164.29	5.19	18.44	0.39
Downgradient	GSD-AP-MW-2	10/11/2021	524.27	0.17	-46.1	6.59	21.2	6.7
Downgradient	GSD-AP-MW-3	10/05/2021	622.14	0.07	103.16	5.76	21.28	0.41
Downgradient	GSD-AP-MW-4	10/05/2021	431.22	0.11	-70.59	6.58	20.73	2.08
Downgradient	GSD-AP-MW-5	10/05/2021	267.75	0.22	69.13	6.24	21.08	2.81
Downgradient	GSD-AP-MW-6	10/05/2021	166.61	0.11	94.86	5.74	20.04	0.56
Downgradient	GSD-AP-MW-7	10/05/2021	162.09	0.22	120.03	6.06	19.14	0.99
Downgradient	GSD-AP-MW-8	10/12/2021	441.79	0.28	50.05	6.61	18.42	5.89
Downgradient	GSD-AP-MW-9	10/12/2021	313.11	0.21	49.19	6.9	18.97	2.25
Downgradient	GSD-AP-PZ-1	10/05/2021	168.13	0.68	101.9	6.46	19.85	0.96
Downgradient	GSD-AP-PZ-2	10/05/2021	165.56	0.53	104.67	5.72	21.06	4.86
Downgradient	GSD-AP-PZ-5	10/12/2021	41.42	3.89	143.52	5.33	17.84	2.08
Downgradient	GSD-AP-PZ-6	10/12/2021	42.98	5.04	145.69	5.41	19.58	6.06
Vert. Delineation	GSD-AP-MW-21VC	10/06/2021	1478.62	0.16	-155.17	8.53	19.22	9.3
Vert. Delineation	GSD-AP-MW-22VB	10/11/2021	370.58	0.1	-164.26	8.13	18.07	2.76

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

Field Parameters								
Hydraulic Location	**Well**	**Sample Date**	**Conductivity uS/cm**	**DO mg/L**	**ORP mv**	**pH_Field SU**	**Field Temperature C**	**Turbidity NTU**
Vert. Delineation	GSD-AP-MW-2VA	10/06/2021	470.65	0.82	-157.17	8.36	22.4	0.62
Vert. Delineation	GSD-AP-MW-2VB	10/12/2021	901.38	0.37	-195.47	8.62	19.31	4.01
Vert. Delineation	GSD-AP-MW-4V	10/11/2021	439.07	0.17	-49.91	7.82	19.61	1.17
Horiz. Delineation	GSD-AP-MW-18H	10/12/2021	115.05	7.35	162.28	5.12	17.56	1.54
Horiz. Delineation	GSD-AP-MW-19H	10/11/2021	315.23	0.27	22	6.08	24.19	7.48
Horiz. Delineation	GSD-AP-MW-20H	10/11/2021	672.64	0.23	8.59	6.36	19.78	8.97

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

EPA Appendix III Set								
Hydraulic Location	Well	Sample Date	Boron mg/L	Calcium mg/L	Chloride mg/L	Fluoride mg/L	pH_Field SU	Sulfate mg/L
Upgradient	GSD-AP-MW-14	10/12/2021	<0.03	11.8	2.87	<0.06	4.04	95.7
Upgradient	GSD-AP-MW-16	10/06/2021	<0.03	13.4	3.17	<0.06	4.16	93.5
Upgradient	GSD-AP-MW-17	10/06/2021	0.0305 J	31	2.98	0.175	7.92	10.2
Downgradient	GSD-AP-MW-1	10/05/2021	1.02	198	6.1	0.0601 J	5.79	567
Downgradient	GSD-AP-MW-10	10/11/2021	0.09 J	38.2	5.72	0.201	6.72	7.75
Downgradient	GSD-AP-MW-11	10/12/2021	0.125	78.6	5.8	0.134	6.66	142
Downgradient	GSD-AP-MW-12	10/05/2021	0.0661 J	55.8	6.26	<0.06	5.19	195
Downgradient	GSD-AP-MW-2	10/11/2021	0.459	87.1	2.43	0.283	6.59	112
Downgradient	GSD-AP-MW-3	10/05/2021	1.01	65.9	5.09	<0.06	5.76	228
Downgradient	GSD-AP-MW-4	10/05/2021	0.344	27.4	9.3	0.214	6.58	37.8
Downgradient	GSD-AP-MW-5	10/05/2021	0.26	36	6.78	0.122	6.24	14.4
Downgradient	GSD-AP-MW-6	10/05/2021	0.0649 J	11.4	9.09	<0.06	5.74	14.2
Downgradient	GSD-AP-MW-7	10/05/2021	0.0673 J	15.9	6.43	0.0933 J	6.06	9.19
Downgradient	GSD-AP-MW-8	10/12/2021	0.0462 J	66.3	5.6	0.123	6.61	16
Downgradient	GSD-AP-MW-9	10/12/2021	0.0632 J	35.4	7.78	0.147	6.9	18
Downgradient	GSD-AP-PZ-1	10/05/2021	<0.03	25.4	3.23	<0.06	6.46	2.17
Downgradient	GSD-AP-PZ-2	10/05/2021	<0.03	17.6	5.79	<0.06	5.72	5.29
Downgradient	GSD-AP-PZ-5	10/12/2021	<0.03	2.94	4.07	<0.06	5.33	0.895 J
Downgradient	GSD-AP-PZ-6	10/12/2021	<0.03	3.29	3.68	<0.06	5.41	1.34
Vert. Delineation	GSD-AP-MW-21VC	10/06/2021	0.532	3.46	166	8.34	8.53	8.35
Vert. Delineation	GSD-AP-MW-22VB	10/11/2021	0.378	9.35	1.72	1.43	8.13	13.8

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

EPA Appendix III Set								
Hydraulic Location	**Well**	**Sample Date**	**Boron mg/L**	**Calcium mg/L**	**Chloride mg/L**	**Fluoride mg/L**	**pH_Field SU**	**Sulfate mg/L**
Vert. Delineation	GSD-AP-MW-2VA	10/06/2021	0.54	5.38	6.82	2.56	8.36	2.44
Vert. Delineation	GSD-AP-MW-2VB	10/12/2021	0.617	3.96	38	5.97	8.62	15.2
Vert. Delineation	GSD-AP-MW-4V	10/11/2021	0.0596 J	23	5.65	0.23	7.82	1.7
Horiz. Delineation	GSD-AP-MW-18H	10/12/2021	0.0717 J	10.3	4.59	<0.06	5.12	36.7
Horiz. Delineation	GSD-AP-MW-19H	10/11/2021	0.328	40	7.04	0.0779 J	6.08	61.7
Horiz. Delineation	GSD-AP-MW-20H	10/11/2021	0.504	63.4	6.37	0.127	6.36	174

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	GSD-AP-MW-14	10/12/2021	<0.000508	0.00131	0.0268	0.00115	0.000587	0.000593 J	0.0291	<0.06
Upgradient	GSD-AP-MW-16	10/06/2021	<0.000508	0.00207	0.0215	0.000487 J	0.00068	0.000455 J	0.0321	<0.06
Upgradient	GSD-AP-MW-17	10/06/2021	<0.000508	0.000263	0.307	<0.000406	<6.8e-005	0.000273 J	0.000126 J	0.175
Downgradient	GSD-AP-MW-1	10/05/2021	<0.000508	0.00356	0.0304	<0.000406	0.000102 J	0.000228 J	0.0169	0.0601 J
Downgradient	GSD-AP-MW-10	10/11/2021	<0.000508	0.0037	0.292	<0.000406	<6.8e-005	0.000285 J	0.000886	0.201
Downgradient	GSD-AP-MW-11	10/12/2021	<0.000508	0.00272	0.17	<0.000406	<6.8e-005	0.000267 J	0.000275	0.134
Downgradient	GSD-AP-MW-12	10/05/2021	<0.000508	<6.8e-005	0.0417	<0.000406	0.000367	0.000339 J	0.00448	<0.06
Downgradient	GSD-AP-MW-2	10/11/2021	<0.000508	0.424	0.0807	<0.000406	<6.8e-005	0.000479 J	0.0165	0.283
Downgradient	GSD-AP-MW-3	10/05/2021	<0.000508	0.000207	0.0344	<0.000406	0.000213	0.000234 J	0.016	<0.06
Downgradient	GSD-AP-MW-4	10/05/2021	<0.000508	0.0147	0.202	<0.000406	<6.8e-005	<0.000203	0.0238	0.214
Downgradient	GSD-AP-MW-5	10/05/2021	<0.000508	0.000133 J	0.221	<0.000406	<6.8e-005	0.000281 J	0.00116	0.122
Downgradient	GSD-AP-MW-6	10/05/2021	<0.000508	<6.8e-005	0.0741	<0.000406	<6.8e-005	0.000246 J	0.00104	<0.06
Downgradient	GSD-AP-MW-7	10/05/2021	<0.000508	6.94e-005 J	0.0716	<0.000406	<6.8e-005	0.000248 J	0.000182 J	0.0933 J
Downgradient	GSD-AP-MW-8	10/12/2021	<0.000508	0.00287	0.203	<0.000406	<6.8e-005	<0.000203	0.00298	0.123
Downgradient	GSD-AP-MW-9	10/12/2021	<0.000508	0.000635	0.147	<0.000406	<6.8e-005	0.00031 J	0.00113	0.147
Downgradient	GSD-AP-PZ-1	10/05/2021	<0.000508	<6.8e-005	0.0811	<0.000406	<6.8e-005	0.000352 J	0.000436	<0.06
Downgradient	GSD-AP-PZ-2	10/05/2021	<0.000508	9.28e-005 J	0.118	<0.000406	<6.8e-005	0.000346 J	0.00287	<0.06
Downgradient	GSD-AP-PZ-5	10/12/2021	<0.000508	<6.8e-005	0.0494	<0.000406	8.42e-005 J	0.000337 J	8.08e-005 J	<0.06
Downgradient	GSD-AP-PZ-6	10/12/2021	<0.000508	<6.8e-005	0.0303	<0.000406	<6.8e-005	0.000307 J	0.000142 J	<0.06
Vert. Delineation	GSD-AP-MW-21VC	10/06/2021	0.00051 J	0.00162	0.374	<0.000406	<6.8e-005	0.00111	0.000205	8.34
Vert. Delineation	GSD-AP-MW-22VB	10/11/2021	0.00167	0.00408	0.238	<0.000406	<6.8e-005	0.000412 J	<6.8e-005	1.43

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

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

EPA Appendix IV Set								
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Upgradient	GSD-AP-MW-14	10/12/2021	0.00156	<0.007105	<0.0003	<6.8e-005	0.00287	<6.8e-005
Upgradient	GSD-AP-MW-16	10/06/2021	0.00116	<0.007105	<0.0003	<6.8e-005	0.00262	<6.8e-005
Upgradient	GSD-AP-MW-17	10/06/2021	<6.8e-005	0.00881 J	<0.0003	0.000453	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-1	10/05/2021	<6.8e-005	<0.007105	<0.0003	<6.8e-005	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-10	10/11/2021	<6.8e-005	<0.007105	<0.0003	0.000451	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-11	10/12/2021	<6.8e-005	<0.007105	<0.0003	0.000152 J	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-12	10/05/2021	<6.8e-005	<0.007105	<0.0003	<6.8e-005	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-2	10/11/2021	9.28e-005 J	0.0225	<0.0003	0.0204	<0.000508	0.000294
Downgradient	GSD-AP-MW-3	10/05/2021	<6.8e-005	<0.007105	<0.0003	<6.8e-005	<0.000508	0.000136 J
Downgradient	GSD-AP-MW-4	10/05/2021	<6.8e-005	<0.007105	<0.0003	0.00111	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-5	10/05/2021	<6.8e-005	<0.007105	<0.0003	0.00015 J	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-6	10/05/2021	<6.8e-005	<0.007105	<0.0003	<6.8e-005	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-7	10/05/2021	<6.8e-005	<0.007105	<0.0003	9.55e-005 J	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-8	10/12/2021	<6.8e-005	<0.007105	<0.0003	0.000319	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-9	10/12/2021	<6.8e-005	<0.007105	<0.0003	0.000177 J	<0.000508	<6.8e-005
Downgradient	GSD-AP-PZ-1	10/05/2021	<6.8e-005	<0.007105	<0.0003	7.3e-005 J	<0.000508	<6.8e-005
Downgradient	GSD-AP-PZ-2	10/05/2021	0.000121 J	<0.007105	<0.0003	0.00028	<0.000508	<6.8e-005
Downgradient	GSD-AP-PZ-5	10/12/2021	<6.8e-005	<0.007105	<0.0003	<6.8e-005	<0.000508	<6.8e-005
Downgradient	GSD-AP-PZ-6	10/12/2021	0.000119 J	<0.007105	<0.0003	<6.8e-005	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-21VC	10/06/2021	0.000225	0.227	<0.0003	0.00107	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-22VB	10/11/2021	<6.8e-005	0.0544	<0.0003	0.00538	<0.000508	<6.8e-005

Notes:
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

EPA Appendix IV Set										
Hydraulic Location	**Well**	**Sample Date**	**Antimony mg/L**	**Arsenic mg/L**	**Barium mg/L**	**Beryllium mg/L**	**Cadmium mg/L**	**Chromium mg/L**	**Cobalt mg/L**	**Fluoride mg/L**
Vert. Delineation	GSD-AP-MW-2VA	10/06/2021	<0.000508	0.00139	0.12	<0.000406	<6.8e-005	0.00025 J	<6.8e-005	2.56
Vert. Delineation	GSD-AP-MW-2VB	10/12/2021	<0.000508	0.000426	0.242	<0.000406	<6.8e-005	0.000353 J	<6.8e-005	5.97
Vert. Delineation	GSD-AP-MW-4V	10/11/2021	<0.000508	0.000366	0.483	<0.000406	<6.8e-005	0.000314 J	<6.8e-005	0.23
Horiz. Delineation	GSD-AP-MW-18H	10/12/2021	<0.000508	0.00019 J	0.0298	<0.000406	<6.8e-005	0.000209 J	0.000615	<0.06
Horiz. Delineation	GSD-AP-MW-19H	10/11/2021	<0.000508	0.000846	0.17	<0.000406	0.000124 J	0.000475 J	0.00579	0.0779 J
Horiz. Delineation	GSD-AP-MW-20H	10/11/2021	<0.000508	0.00191	0.134	<0.000406	<6.8e-005	0.000246 J	0.00995	0.127

Notes:
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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

EPA Appendix IV Set								
Hydraulic Location	**Well**	**Sample Date**	**Lead mg/L**	**Lithium mg/L**	**Mercury mg/L**	**Molybdenum mg/L**	**Selenium mg/L**	**Thallium mg/L**
Vert. Delineation	GSD-AP-MW-2VA	10/06/2021	<6.8e-005	0.0685	<0.0003	0.00363	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-2VB	10/12/2021	<6.8e-005	0.129	<0.0003	0.00156	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-4V	10/11/2021	<6.8e-005	0.0198 J	<0.0003	0.00173	<0.000508	<6.8e-005
Horiz. Delineation	GSD-AP-MW-18H	10/12/2021	<6.8e-005	<0.007105	<0.0003	<6.8e-005	0.000679 J	<6.8e-005
Horiz. Delineation	GSD-AP-MW-19H	10/11/2021	0.000155 J	<0.007105	<0.0003	0.000118 J	<0.000508	<6.8e-005
Horiz. Delineation	GSD-AP-MW-20H	10/11/2021	8.19e-005 J	<0.007105	<0.0003	0.000312	<0.000508	0.00013 J

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Chloride mg/L	Sulfate mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L	Manganese Total mg/L	Sodium mg/L
Upgradient	GSD-AP-MW-14	10/12/2021	2.87	95.7	11.8	0.014 J	0.383 J	4.39	0.393	2.29
Upgradient	GSD-AP-MW-16	10/06/2021	3.17	93.5	13.4	0.00888 J	0.349 J	5.08	0.382	2.74
Upgradient	GSD-AP-MW-17	10/06/2021	2.98	10.2	31	0.0754	0.567	5.3	0.0175	26.7
Downgradient	GSD-AP-MW-1	10/05/2021	6.1	567	198	2.38	8.76	41.7	3.57	21.8
Downgradient	GSD-AP-MW-10	10/11/2021	5.72	7.75	38.2	21.6	0.585	6.18	0.689	12.6
Downgradient	GSD-AP-MW-11	10/12/2021	5.8	142	78.6	13.6	1.3	11.4	0.983	13
Downgradient	GSD-AP-MW-12	10/05/2021	6.26	195	55.8	0.0729	0.853	26	1.87	15.7
Downgradient	GSD-AP-MW-2	10/11/2021	2.43	112	87.1	6.3	7.84	11.2	5.3	5.42
Downgradient	GSD-AP-MW-3	10/05/2021	5.09	228	65.9	0.256	3.32	16.8	24.8	12.4
Downgradient	GSD-AP-MW-4	10/05/2021	9.3	37.8	27.4	44.5	2.46	7.93	1.24	14.3
Downgradient	GSD-AP-MW-5	10/05/2021	6.78	14.4	36	0.283	0.736	7.42	0.166	13.7
Downgradient	GSD-AP-MW-6	10/05/2021	9.09	14.2	11.4	0.0726	0.979	3.29	0.241	11.8
Downgradient	GSD-AP-MW-7	10/05/2021	6.43	9.19	15.9	0.0213 J	0.292 J	3.51	0.0486	15.9
Downgradient	GSD-AP-MW-8	10/12/2021	5.6	16	66.3	8.84	0.446 J	6.51	2	9.59
Downgradient	GSD-AP-MW-9	10/12/2021	7.78	18	35.4	1.33	1.8	6.76	1.5	13.9
Downgradient	GSD-AP-PZ-1	10/05/2021	3.23	2.17	25.4	0.0485	0.497 J	3.87	0.0494	3.9
Downgradient	GSD-AP-PZ-2	10/05/2021	5.79	5.29	17.6	0.17	0.535	3.58	0.195	6.56
Downgradient	GSD-AP-PZ-5	10/12/2021	4.07	0.895 J	2.94	0.0164 J	0.549	1.1	0.0125	3.68
Downgradient	GSD-AP-PZ-6	10/12/2021	3.68	1.34	3.29	0.0571	0.507 J	1.07	0.00422	3.74
Vert. Delineation	GSD-AP-MW-21VC	10/06/2021	166	8.35	3.46	0.536	1.08	1.16	0.0093	357

Notes:
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

General Chemistry and MNA Parameters					
Hydraulic Location	**Well**	**Sample Date**	**Alkalinity Total as CaCO3 mg/L**	**Carbonate Alkalinity as CaCO3 mg/L**	**Bicarbonate Alkalinity as CaCO3 mg/L**
Upgradient	GSD-AP-MW-14	10/12/2021	--	--	--
Upgradient	GSD-AP-MW-16	10/06/2021	--	--	--
Upgradient	GSD-AP-MW-17	10/06/2021	123	1.23	122
Downgradient	GSD-AP-MW-1	10/05/2021	107	0.01	107
Downgradient	GSD-AP-MW-10	10/11/2021	151	0.11	151
Downgradient	GSD-AP-MW-11	10/12/2021	154	0.08	154
Downgradient	GSD-AP-MW-12	10/05/2021	39.6	0	39.6
Downgradient	GSD-AP-MW-2	10/11/2021	175	0.12	175
Downgradient	GSD-AP-MW-3	10/05/2021	74	0.01	74
Downgradient	GSD-AP-MW-4	10/05/2021	113	0.03	113
Downgradient	GSD-AP-MW-5	10/05/2021	135	0.03	135
Downgradient	GSD-AP-MW-6	10/05/2021	45.5	0.01	45.5
Downgradient	GSD-AP-MW-7	10/05/2021	70.2	0.02	70.2
Downgradient	GSD-AP-MW-8	10/12/2021	202	0.12	202
Downgradient	GSD-AP-MW-9	10/12/2021	117	0.13	117
Downgradient	GSD-AP-PZ-1	10/05/2021	81.2	0.03	81.2
Downgradient	GSD-AP-PZ-2	10/05/2021	67.4	0.01	67.4
Downgradient	GSD-AP-PZ-5	10/12/2021	23.7	0	23.7
Downgradient	GSD-AP-PZ-6	10/12/2021	23.6	0	23.6
Vert. Delineation	GSD-AP-MW-21VC	10/06/2021	549	16.2	533

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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Chloride mg/L	Sulfate mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L	Manganese Total mg/L	Sodium mg/L
Vert. Delineation	GSD-AP-MW-22VB	10/11/2021	1.72	13.8	9.35	0.102	0.586	2.05	0.0151	85.5
Vert. Delineation	GSD-AP-MW-2VA	10/06/2021	6.82	2.44	5.38	0.0933	0.706	1.31	0.0144	126
Vert. Delineation	GSD-AP-MW-2VB	10/12/2021	38	15.2	3.96	0.181	1.06	1.33	0.0396	222
Vert. Delineation	GSD-AP-MW-4V	10/11/2021	5.65	1.7	23	0.452	0.865	5.5	0.0485	58.5
Horiz. Delineation	GSD-AP-MW-18H	10/12/2021	4.59	36.7	10.3	<0.00812	0.921	4.15	0.0254	4.44
Horiz. Delineation	GSD-AP-MW-19H	10/11/2021	7.04	61.7	40	2.14	0.999	8	1.01	14.1
Horiz. Delineation	GSD-AP-MW-20H	10/11/2021	6.37	174	63.4	2.87	3	18.3	31.9	17.4

Notes:
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
10/05/2021 - 10/12/2021

General Chemistry and MNA Parameters					
Hydraulic Location	**Well**	**Sample Date**	**Alkalinity Total as CaCO3 mg/L**	**Carbonate Alkalinity as CaCO3 mg/L**	**Bicarbonate Alkalinity as CaCO3 mg/L**
Vert. Delineation	GSD-AP-MW-22VB	10/11/2021	231	4.87	226
Vert. Delineation	GSD-AP-MW-2VA	10/06/2021	269	4.23	265
Vert. Delineation	GSD-AP-MW-2VB	10/12/2021	406	12.3	394
Vert. Delineation	GSD-AP-MW-4V	10/11/2021	236	2.1	234
Horiz. Delineation	GSD-AP-MW-18H	10/12/2021	4	0	4
Horiz. Delineation	GSD-AP-MW-19H	10/11/2021	95.6	0.02	95.6
Horiz. Delineation	GSD-AP-MW-20H	10/11/2021	140	0.05	140

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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

Field Parameters								
Hydraulic Location	Well	Sample Date	DO mg/L	ORP mv	Turbidity NTU	Conductivity uS/cm	pH_Field SU	Field Temperature C
Upgradient	GSD-AP-MW-16	05/17/2022	4.49	388.56	2.68	360.05	4.34	18.47
Downgradient	GSD-AP-MW-1	05/10/2022	0.15	137.1	1.67	1031.77	5.77	16.34
Downgradient	GSD-AP-MW-10	05/10/2022	0.25	-68.86	4.85	332.6	6.39	19.88
Downgradient	GSD-AP-MW-11	05/17/2022	0.29	-41.99	4.55	559.32	6.44	19.12
Downgradient	GSD-AP-MW-12	05/10/2022	0.17	92.7	0.51	465.11	4.78	17.98
Downgradient	GSD-AP-MW-2	05/16/2022	0.21	-7.15	6.16	420.43	6.16	17.67
Downgradient	GSD-AP-MW-3	05/10/2022	0.14	169.73	0.23	551.26	5.95	19.09
Downgradient	GSD-AP-MW-4	05/16/2022	0.23	-93.51	5.4	443.5	6.61	18.15
Downgradient	GSD-AP-MW-6	05/10/2022	0.12	151.68	0.42	135.84	5.51	16.74
Downgradient	GSD-AP-MW-7	05/10/2022	0.47	157.77	0.63	118.31	5.08	19.86
Downgradient	GSD-AP-MW-8	05/11/2022	0.28	-16.58	1.71	360.82	6.25	17.86
Downgradient	GSD-AP-MW-9	05/11/2022	0.24	-2.08	1	284.32	6.7	18.32
Downgradient	GSD-AP-PZ-5	05/10/2022	4.19	273.72	2.49	44.27	5.38	16.28
Downgradient	GSD-AP-PZ-6	05/10/2022	5.89	278.39	4.78	45.12	5.57	16.91
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	0.13	-111.63	7.63	1488.31	8.31	18.49
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	0.17	-144.13	2.64	396.46	8.29	17.09
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	0.64	-90.42	0.64	511.85	8.1	21.28
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	0.37	-177.5	1.22	905.13	8.48	20.6
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	0.21	-124.2	1.75	361.94	7.91	18.45
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	7.86	288.35	0.67	148.54	4.87	15.87
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	0.18	122.33	4.65	237.82	5.24	16.3

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

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Table 7. Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

Field Parameters								
Hydraulic Location	**Well**	**Sample Date**	**DO mg/L**	**ORP mv**	**Turbidity NTU**	**Conductivity uS/cm**	**pH_Field SU**	**Field Temperature C**
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	0.15	37.26	3.94	613.72	5.74	17.29

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

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

EPA Appendix III Set								
Hydraulic Location	**Well**	**Sample Date**	**Boron mg/L**	**Calcium mg/L**	**Chloride mg/L**	**Fluoride mg/L**	**pH_Field SU**	**Sulfate mg/L**
Upgradient	GSD-AP-MW-16	05/17/2022	<0.03	19.7	3.58	<0.06	4.34	139
Downgradient	GSD-AP-MW-1	05/10/2022	0.954	166	5.97	<0.06	5.77	508
Downgradient	GSD-AP-MW-10	05/10/2022	0.097 J	42.2	5.72	0.0918 J	6.39	11.6
Downgradient	GSD-AP-MW-11	05/17/2022	0.139	80.6	5.92	<0.06	6.44	145
Downgradient	GSD-AP-MW-12	05/10/2022	0.066 J	48.2	5.64	<0.06	4.78	193
Downgradient	GSD-AP-MW-2	05/16/2022	0.381	58.2	2.14	0.264	6.16	84.3
Downgradient	GSD-AP-MW-3	05/10/2022	0.998	58.5	4.59	0.0714 J	5.95	215
Downgradient	GSD-AP-MW-4	05/16/2022	0.342	30.7	8.07	0.247	6.61	51.8
Downgradient	GSD-AP-MW-6	05/10/2022	0.0681 J	10.8	8.87	<0.06	5.51	14.8
Downgradient	GSD-AP-MW-7	05/10/2022	0.0465 J	9.95	3.96	0.0627 J	5.08	7.13
Downgradient	GSD-AP-MW-8	05/11/2022	0.037 J	61.9	5.13	0.0695 J	6.25	11.8
Downgradient	GSD-AP-MW-9	05/11/2022	0.0636 J	36.9	7.2	0.108 J	6.7	17.7
Downgradient	GSD-AP-PZ-5	05/10/2022	<0.03	2.87	4.12	<0.06	5.38	1.02 J
Downgradient	GSD-AP-PZ-6	05/10/2022	<0.03	3.24	3.68	<0.06	5.57	1.28 J
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	0.548	3.3	188	8.22	8.31	19.1
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	0.385	9.99	1.69	1.27	8.29	6.55
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	0.556	5.22	6.86	2.4	8.1	1.15 J
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	0.622	3.81	38.8	6.14	8.48	7.94
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	0.062 J	22.6	5.48	0.175	7.91	1.73 J
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	0.0883 J	12.4	6.38	<0.06	4.87	42.1
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	0.336	26.9	7.23	<0.06	5.24	60.2

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

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

EPA Appendix III Set								
Hydraulic Location	**Well**	**Sample Date**	**Boron mg/L**	**Calcium mg/L**	**Chloride mg/L**	**Fluoride mg/L**	**pH_Field SU**	**Sulfate mg/L**
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	0.632	74.7	6.22	<0.06	5.74	187

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

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

EPA Appendix IV Set										
Hydraulic Location	Well	Sample Date	Antimony mg/L	Arsenic mg/L	Barium mg/L	Beryllium mg/L	Cadmium mg/L	Chromium mg/L	Cobalt mg/L	Fluoride mg/L
Upgradient	GSD-AP-MW-16	05/17/2022	<0.000508	0.00457	0.0288	0.000606 J	0.00108	0.000589 J	0.0563	<0.06
Downgradient	GSD-AP-MW-1	05/10/2022	<0.000508	0.00221	0.0275	<0.000406	0.000216	0.000254 J	0.0136	<0.06
Downgradient	GSD-AP-MW-10	05/10/2022	<0.000508	0.00361	0.318	<0.000406	<6.8e-005	0.000305 J	0.000907	0.0918 J
Downgradient	GSD-AP-MW-11	05/17/2022	<0.000508	0.00281	0.195	<0.000406	<6.8e-005	0.000385 J	0.00044	<0.06
Downgradient	GSD-AP-MW-12	05/10/2022	<0.000508	<8.1e-005	0.0377	<0.000406	0.000332	0.000414 J	0.0049	<0.06
Downgradient	GSD-AP-MW-2	05/16/2022	<0.000508	0.569	0.0974	<0.000406	<6.8e-005	0.000342 J	0.0366	0.264
Downgradient	GSD-AP-MW-3	05/10/2022	<0.000508	0.000162 J	0.0287	<0.000406	0.00035	0.000286 J	0.0147	0.0714 J
Downgradient	GSD-AP-MW-4	05/16/2022	<0.000508	0.0132	0.23	<0.000406	<6.8e-005	0.000227 J	0.0289	0.247
Downgradient	GSD-AP-MW-6	05/10/2022	<0.000508	<8.1e-005	0.0762	<0.000406	<6.8e-005	<0.000203	0.00114	<0.06
Downgradient	GSD-AP-MW-7	05/10/2022	<0.000508	<8.1e-005	0.0527	<0.000406	<6.8e-005	0.000245 J	0.0004	0.0627 J
Downgradient	GSD-AP-MW-8	05/11/2022	<0.000508	0.00323	0.32	<0.000406	7.28e-005 J	0.000217 J	0.00461	0.0695 J
Downgradient	GSD-AP-MW-9	05/11/2022	<0.000508	0.000555	0.16	<0.000406	<6.8e-005	0.00021 J	0.000908	0.108 J
Downgradient	GSD-AP-PZ-5	05/10/2022	<0.000508	<8.1e-005	0.0497	<0.000406	<6.8e-005	0.000368 J	0.00015 J	<0.06
Downgradient	GSD-AP-PZ-6	05/10/2022	<0.000508	<8.1e-005	0.0309	<0.000406	<6.8e-005	0.00037 J	0.000121 J	<0.06
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	0.000508 J	0.0014	0.435	<0.000406	<6.8e-005	0.00104	0.000193 J	8.22
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	<0.000508	0.00303	0.276	<0.000406	<6.8e-005	0.00032 J	8.2e-005 J	1.27
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	<0.000508	0.00135	0.132	<0.000406	<6.8e-005	0.000288 J	<6.8e-005	2.4
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	<0.000508	0.000393	0.322	<0.000406	<6.8e-005	0.000264 J	<6.8e-005	6.14
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	<0.000508	0.000309	0.525	<0.000406	<6.8e-005	0.000239 J	<6.8e-005	0.175
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	<0.000508	0.000154 J	0.0361	<0.000406	<6.8e-005	0.00025 J	0.000302	<0.06
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	<0.000508	0.000183 J	0.124	<0.000406	0.000151 J	0.000277 J	0.00485	<0.06

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
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3. U - Radium data is a combination of radium isotopes 226 and 228. When results are reported below the MDC (Minimum Detectable Concentration), data is displayed with an accompanying U. The MDC varies depending upon the sample amount and elapsed time of the measurment.
4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

EPA Appendix IV Set								
Hydraulic Location	Well	Sample Date	Lead mg/L	Lithium mg/L	Mercury mg/L	Molybdenum mg/L	Selenium mg/L	Thallium mg/L
Upgradient	GSD-AP-MW-16	05/17/2022	0.00178	<0.007105	<0.0003	<0.000102	0.00609	<6.8e-005
Downgradient	GSD-AP-MW-1	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	0.000129 J
Downgradient	GSD-AP-MW-10	05/10/2022	<6.8e-005	<0.007105	<0.0003	0.000466	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-11	05/17/2022	<6.8e-005	<0.007105	<0.0003	0.000121 J	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-12	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-2	05/16/2022	<6.8e-005	0.0271	<0.0003	0.0201	<0.000508	0.000414
Downgradient	GSD-AP-MW-3	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	0.000113 J
Downgradient	GSD-AP-MW-4	05/16/2022	<6.8e-005	<0.007105	<0.0003	0.00122	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-6	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-7	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-8	05/11/2022	<6.8e-005	<0.007105	<0.0003	0.000403	<0.000508	<6.8e-005
Downgradient	GSD-AP-MW-9	05/11/2022	<6.8e-005	<0.007105	<0.0003	0.000236	<0.000508	<6.8e-005
Downgradient	GSD-AP-PZ-5	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005
Downgradient	GSD-AP-PZ-6	05/10/2022	0.000118 J	<0.007105	0.00286	<0.000102	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	0.000216	0.196	<0.0003	0.00194	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	<6.8e-005	0.0499	<0.0003	0.0028	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	<6.8e-005	0.0612	<0.0003	0.00357	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	<6.8e-005	0.111	<0.0003	0.000955	<0.000508	<6.8e-005
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	<6.8e-005	0.0187 J	<0.0003	0.00135	<0.000508	<6.8e-005
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	<6.8e-005	<0.007105	<0.0003	<0.000102	0.00125	<6.8e-005
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	0.000151 J	<0.007105	<0.0003	<0.000102	<0.000508	<6.8e-005

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

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

EPA Appendix IV Set										
Hydraulic Location	**Well**	**Sample Date**	**Antimony mg/L**	**Arsenic mg/L**	**Barium mg/L**	**Beryllium mg/L**	**Cadmium mg/L**	**Chromium mg/L**	**Cobalt mg/L**	**Fluoride mg/L**
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	<0.000508	0.002	0.115	<0.000406	<6.8e-005	0.000215 J	0.0102	<0.06

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

EPA Appendix IV Set								
Hydraulic Location	**Well**	**Sample Date**	**Lead mg/L**	**Lithium mg/L**	**Mercury mg/L**	**Molybdenum mg/L**	**Selenium mg/L**	**Thallium mg/L**
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	<6.8e-005	<0.007105	<0.0003	0.000405	<0.000508	0.000132 J

Notes:
1. "J" indicates the result was detected above the MDL but below the PQL
2. "<" indicates the result was not detected above the MDL and is considered a non-detect.
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4. DO - Dissolved Oxygen, ORP - Oxidation Reduction Potential, TDS - Total Dissolved Solids.
5. mg/L - milligrams per liter, mv - millivolts, NTU - nephelometric turbidity unit, C - celsius, SU - standard unit, uS/cm - microseimens per centimeter, pCi/L - picocurries per liter.

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Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Sulfide mg/L	Silica mg/L	Silicon mg/L	Carbon, Total Organic mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L
Upgradient	GSD-AP-MW-16	05/17/2022	0	8.69	4.06	1.03 J	19.7	0.0215 J	0.35 J	7.78
Downgradient	GSD-AP-MW-1	05/10/2022	0	9.89	4.62	<1	166	0.919	7.97	36.1
Downgradient	GSD-AP-MW-10	05/10/2022	0	35.1	16.4	<1	42.2	20.6	0.608	6.45
Downgradient	GSD-AP-MW-11	05/17/2022	0	25	11.7	<1	80.6	13.3	1.32	12.5
Downgradient	GSD-AP-MW-12	05/10/2022	0	17.9	8.36	<1	48.2	<0.00812	0.827	23.6
Downgradient	GSD-AP-MW-2	05/16/2022	0	9.8	4.58	<1	58.2	12.8	7.36	7.71
Downgradient	GSD-AP-MW-3	05/10/2022	0	10.2	4.75	<1	58.5	0.144	2.87	18.3
Downgradient	GSD-AP-MW-4	05/16/2022	0	8.86	4.14	1.5 J	30.7	52.2	2.46	9.9
Downgradient	GSD-AP-MW-6	05/10/2022	0	12.1	5.64	<1	10.8	0.0433	0.9	3.41
Downgradient	GSD-AP-MW-7	05/10/2022	0	16.5	7.73	<1	9.95	0.0139 J	0.236 J	2.77
Downgradient	GSD-AP-MW-8	05/11/2022	0	22.5	10.5	<1	61.9	5.2	0.469 J	7.24
Downgradient	GSD-AP-MW-9	05/11/2022	0	21	9.83	<1	36.9	0.977	1.89	7.36
Downgradient	GSD-AP-PZ-5	05/10/2022	0	15	6.99	<1	2.87	0.0306 J	0.56	1.12
Downgradient	GSD-AP-PZ-6	05/10/2022	0	12.5	5.84	<1	3.24	0.0428	0.428 J	1.09
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	0	9.57	4.47	1.82 J	3.3	0.396	1.21	1.18
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	0	9.5	4.44	<1	9.99	0.143	0.578	2.26
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	0	8.77	4.1	1.03 J	5.22	0.0985	0.682	1.28
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	0	9.18	4.29	2.45	3.81	0.0678	1.07	1.29
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	0	19.6	9.18	<1	22.6	0.418	0.827	5.61
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	0	7.53	3.52	<1	12.4	<0.00812	1.05	5.32

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

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Sodium mg/L	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L
Upgradient	GSD-AP-MW-16	05/17/2022	0.646	3.04	3.58	0.844	139	15.6	--	--
Downgradient	GSD-AP-MW-1	05/10/2022	2.46	17.1	5.97	<0.2	508	0.00808 J	86.1	0.596
Downgradient	GSD-AP-MW-10	05/10/2022	0.671	13	5.72	<0.2	11.6	0.00792 J	162	1.73
Downgradient	GSD-AP-MW-11	05/17/2022	1.25	12.6	5.92	<0.2	145	0.0333	162	0.564
Downgradient	GSD-AP-MW-12	05/10/2022	1.64	15.3	5.64	<0.2	193	<0.00609	36.8	-10000
Downgradient	GSD-AP-MW-2	05/16/2022	9.98	3.54	2.14	<0.2	84.3	0.105	119	1.46
Downgradient	GSD-AP-MW-3	05/10/2022	25	11.9	4.59	<0.2	215	<0.00609	69.4	0.514
Downgradient	GSD-AP-MW-4	05/16/2022	1.96	14.4	8.07	<0.2	51.8	<0.00609	102	1.19
Downgradient	GSD-AP-MW-6	05/10/2022	0.252	12.5	8.87	<0.2	14.8	<0.00609	48.9	-10000
Downgradient	GSD-AP-MW-7	05/10/2022	0.0539	13.6	3.96	0.433	7.13	0.0088 J	59.2	-10000
Downgradient	GSD-AP-MW-8	05/11/2022	1.71	10.5	5.13	<0.2	11.8	<0.00609	194	3.34
Downgradient	GSD-AP-MW-9	05/11/2022	1.48	13.7	7.2	<0.2	17.7	<0.00609	133	-10000
Downgradient	GSD-AP-PZ-5	05/10/2022	0.0149	3.87	4.12	1.05	1.02 J	0.0273	12.4	-10000
Downgradient	GSD-AP-PZ-6	05/10/2022	0.00255	3.85	3.68	1.15	1.28 J	0.0716	14.7	-10000
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	0.00964	392	188	<0.2	19.1	0.666	635	25
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	0.0218	83.1	1.69	<0.2	6.55	0.109	216	6.09
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	0.015	130	6.86	<0.2	1.15 J	0.0188	301	8.3
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	0.0253	224	38.8	<0.2	7.94	0.0755	436	16.1
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	0.0461	60.6	5.48	<0.2	1.73 J	0.0373	215	4.33
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	0.0143	6.06	6.38	1.79	42.1	0.0251	4.6	0.00412

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

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Bicarbonate Alkalinity as CaCO3 mg/L**
Upgradient	GSD-AP-MW-16	05/17/2022	--
Downgradient	GSD-AP-MW-1	05/10/2022	85.5
Downgradient	GSD-AP-MW-10	05/10/2022	160
Downgradient	GSD-AP-MW-11	05/17/2022	161
Downgradient	GSD-AP-MW-12	05/10/2022	36.5
Downgradient	GSD-AP-MW-2	05/16/2022	117
Downgradient	GSD-AP-MW-3	05/10/2022	68.8
Downgradient	GSD-AP-MW-4	05/16/2022	101
Downgradient	GSD-AP-MW-6	05/10/2022	48.5
Downgradient	GSD-AP-MW-7	05/10/2022	58.9
Downgradient	GSD-AP-MW-8	05/11/2022	191
Downgradient	GSD-AP-MW-9	05/11/2022	133
Downgradient	GSD-AP-PZ-5	05/10/2022	12.4
Downgradient	GSD-AP-PZ-6	05/10/2022	14.7
Vert. Delineation	GSD-AP-MW-21VC	05/17/2022	610
Vert. Delineation	GSD-AP-MW-22VB	05/17/2022	210
Vert. Delineation	GSD-AP-MW-2VA	05/16/2022	293
Vert. Delineation	GSD-AP-MW-2VB	05/16/2022	420
Vert. Delineation	GSD-AP-MW-4V	05/11/2022	211
Horiz. Delineation	GSD-AP-MW-18H	05/10/2022	4.59

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

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Sulfide mg/L	Silica mg/L	Silicon mg/L	Carbon, Total Organic mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	0	14.4	6.72	<1	26.9	0.424	0.949	6.52
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	0	7.92	3.7	<1	74.7	3.32	2.8	20.1

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

Southern Company

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Sodium mg/L	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L	Alkalinity Total as CaCO3 mg/L	Carbonate Alkalinity as CaCO3 mg/L
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	0.378	12.1	7.23	0.585	60.2	0.0295	47.3	0.0213
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	30.3	16.7	6.22	<0.2	187	0.0115	163	1.59

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

Table 7. Second Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gadsden Ash Pond
05/10/2022 - 05/17/2022

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Bicarbonate Alkalinity as CaCO3 mg/L**
Horiz. Delineation	GSD-AP-MW-19H	05/16/2022	47.3
Horiz. Delineation	GSD-AP-MW-20H	05/17/2022	161

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

Figures

Legend

- Property Boundary (Approximate)
- Ash Pond Boundary

N

0 500 1,000 2,000 3,000 Feet

SCALE	1:9000
DATE	11/10/2020
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	GBD

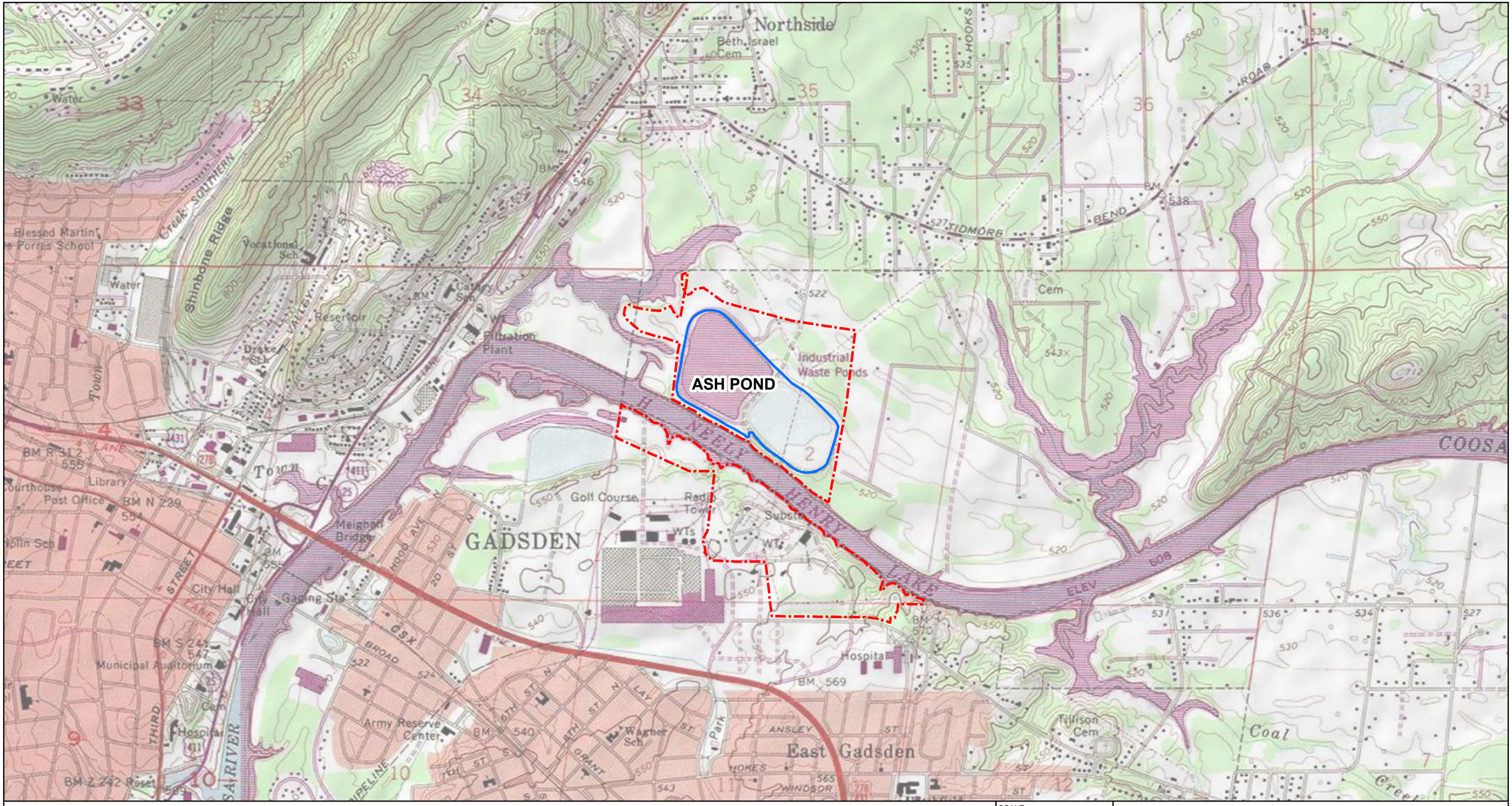
DRAWING TITLE

SITE LOCATION MAP
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 1

Southern Company



Legend

- Ash Pond Boundary
- Property Boundary (Approximate)

N

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

SCALE	1:18000
DATE	11/10/2020
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	GBD

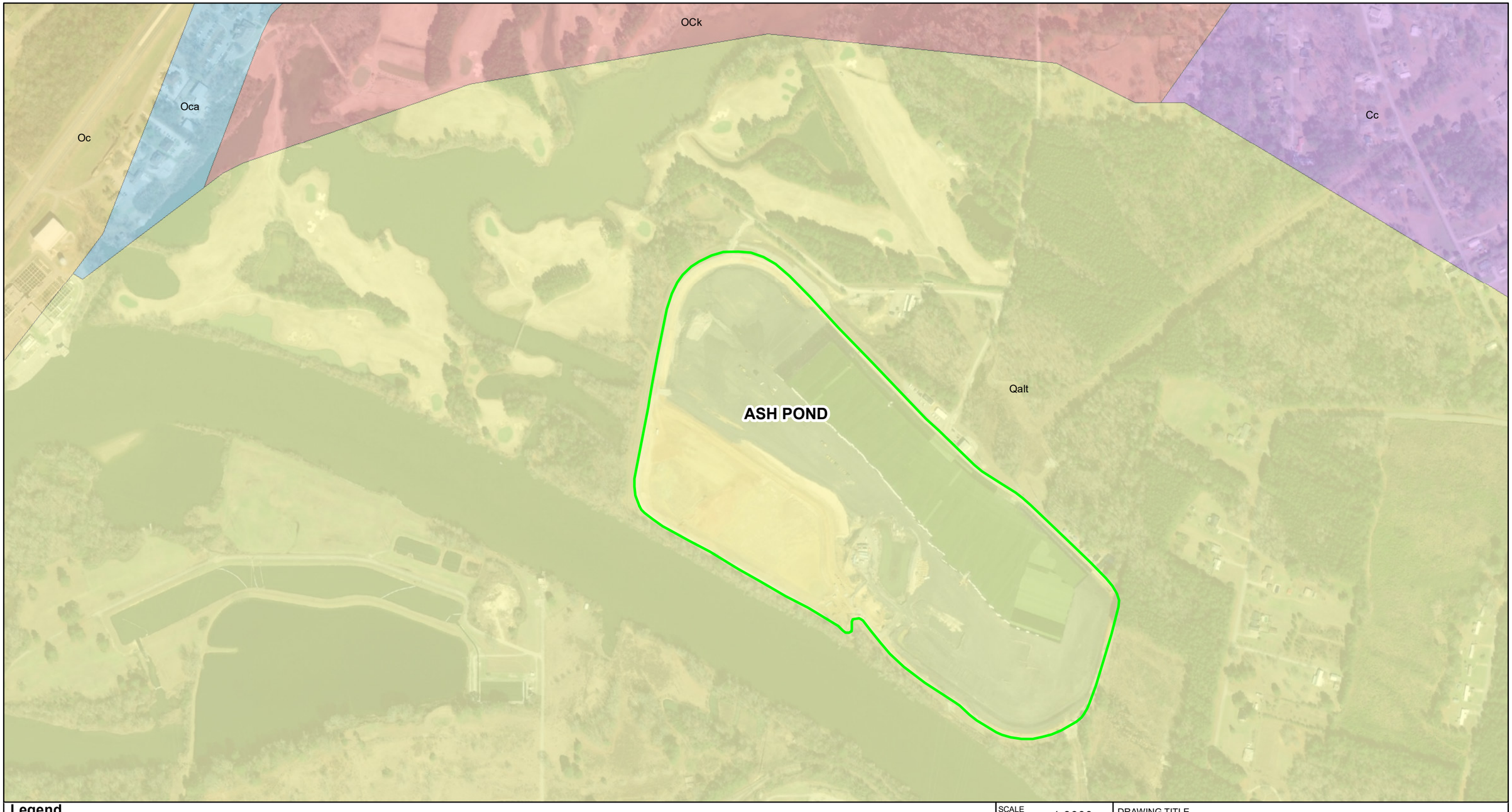
DRAWING TITLE

SITE TOPOGRAPHIC MAP
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 2

Southern Company



Legend

- Ash Pond Boundary

Geologic Units

- Alluvial, coastal, and low terrace deposits (Qalt)
- Attalla Chert Conglomerate Member of the Chickamauga Limestone (Oca)
- Chickamauga Limestone (Oc)
- Conasauga Formation (Cc)
- Knox Group undifferentiated (OCk)

N

0 250 500 1,000 1,500 2,000 Feet

SCALE	1:6000
DATE	11/10/2020
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	GBD

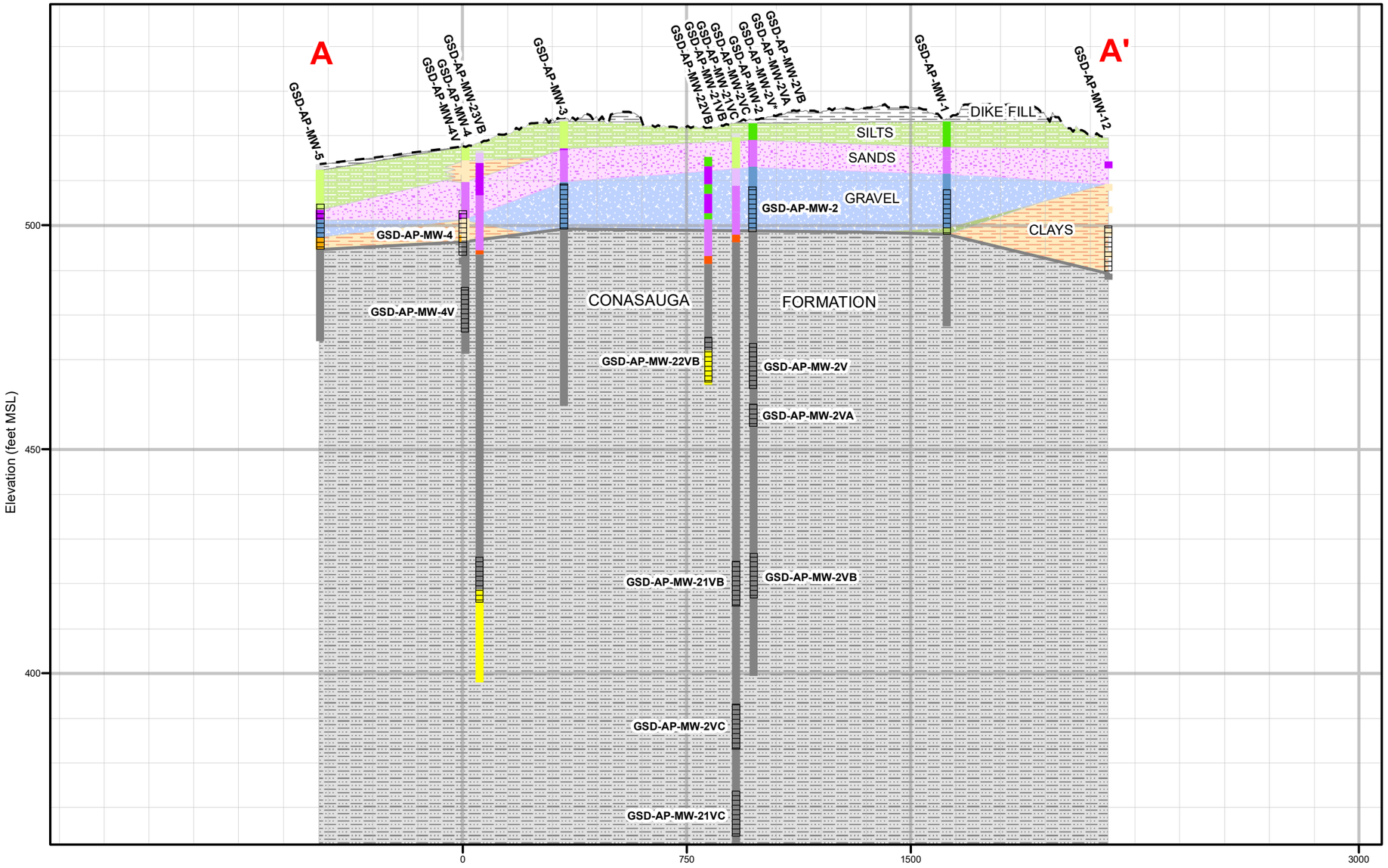
DRAWING TITLE

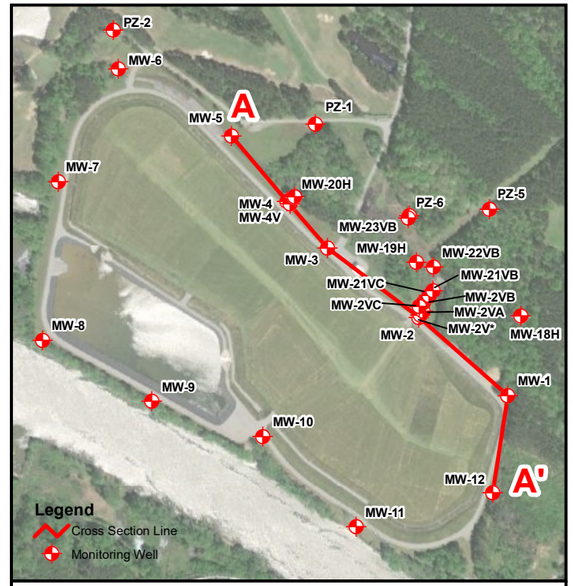
SITE GEOLOGIC MAP
PLANT GADSDEN ASH POND

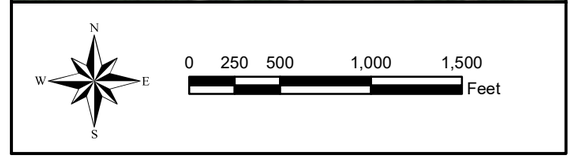
FIGURE NO

FIGURE 3

Southern Company







Notes: 1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. The ground surface shown on the cross section was derived from a digital elevation model raster along the cross section line drawn as shown on the inset map. In addition to boring data from wells located directly on the cross section line, boring data from wells located near but not directly on the cross section line were also utilized for lithologic correlation. These wells' boring data are projected onto the cross section line, and, as such, the ground surface shown on the cross section is higher in elevation than what the ground surface actually is at those locations.

Legend

- Screen Interval
- Ground Surface Elevation
- Unit Boundary

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4600
DATE	1/25/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

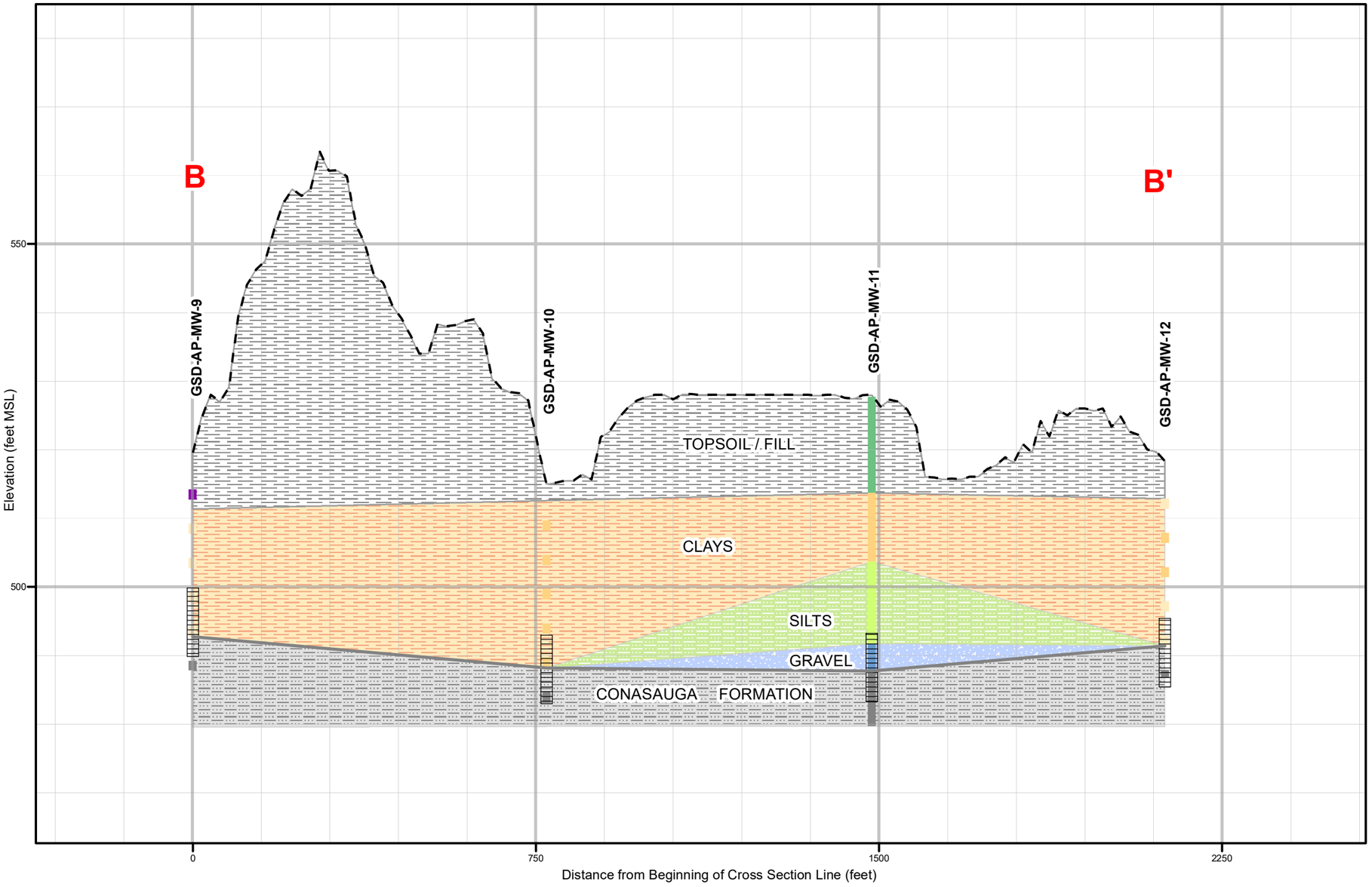
DRAWING TITLE

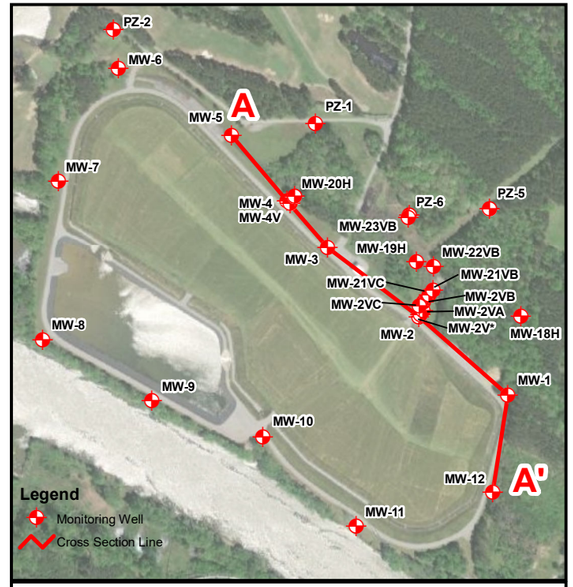
GEOLOGIC CROSS-SECTION A - A'
PLANT GADSDEN ASH POND

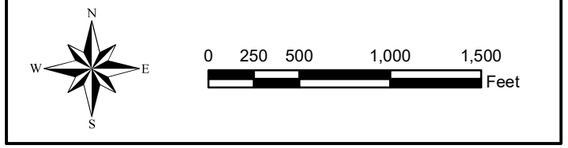
FIGURE NO

FIGURE 4A

Southern Company







Notes: 1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.

Legend

- Screen Interval
- Ground Surface Elevation
- Unit Boundary

Borehole Descriptions

- Clay, Silt, and Gravel Fill
- Lean Clays
- Fat and Silty Clays
- Silt
- Poorly-graded Gravelly Sand
- Well-graded Gravel
- Shale/Siltstone

Geologic Units

- Topsoil/Fill
- Clays
- Silts
- Gravel
- Siltstone/Shale

HORIZONTAL SCALE	1:3000
DATE	1/25/2022
DRAWN BY	KAR
CHECKED BY	CTL

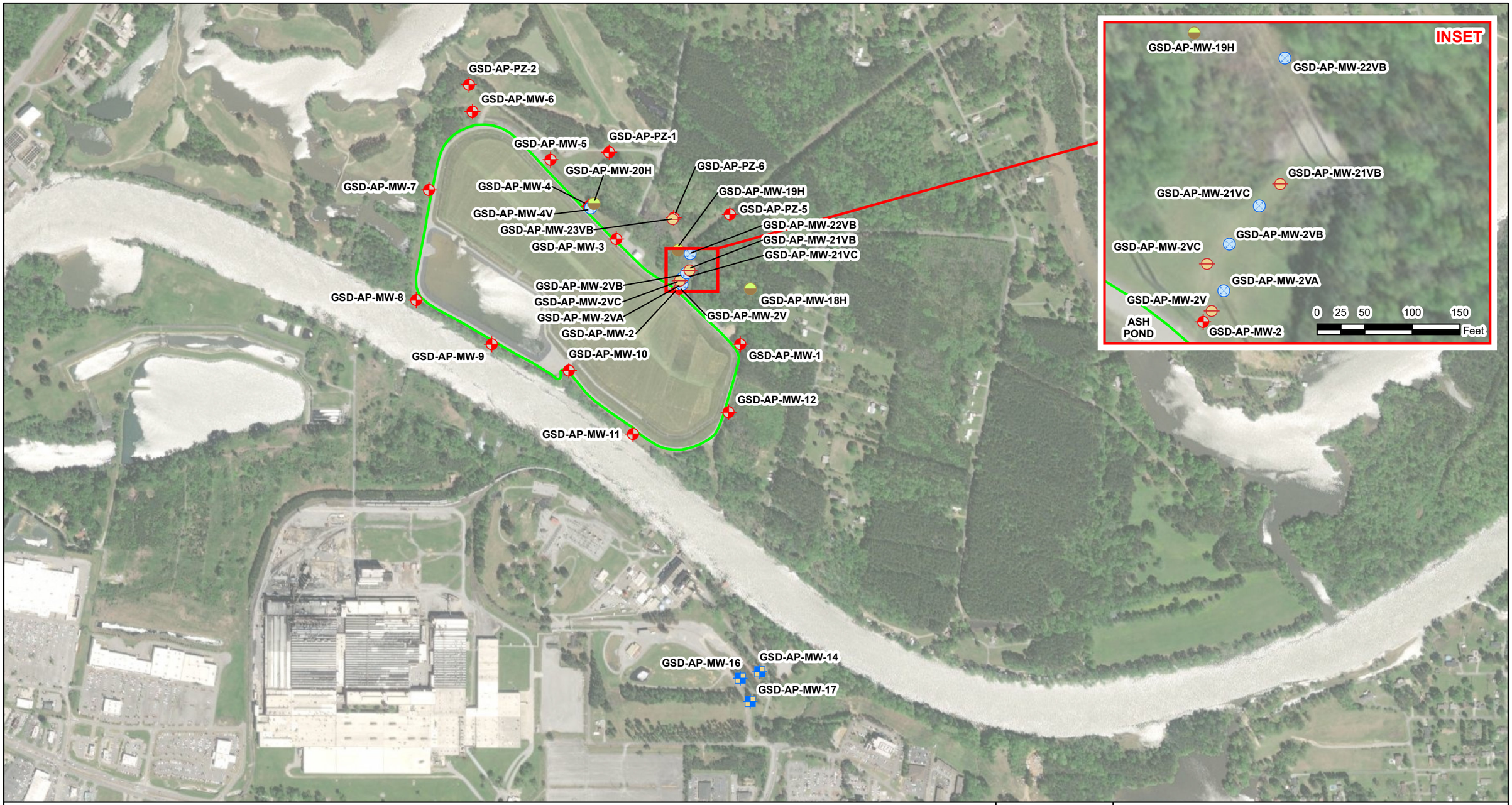
DRAWING TITLE

GEOLOGIC CROSS-SECTION B - B'
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 4B

Southern Company



Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Ash Pond Boundary

N

0 500 1,000 2,000 Feet

SCALE	1:9000
DATE	1/25/2022
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	GFB

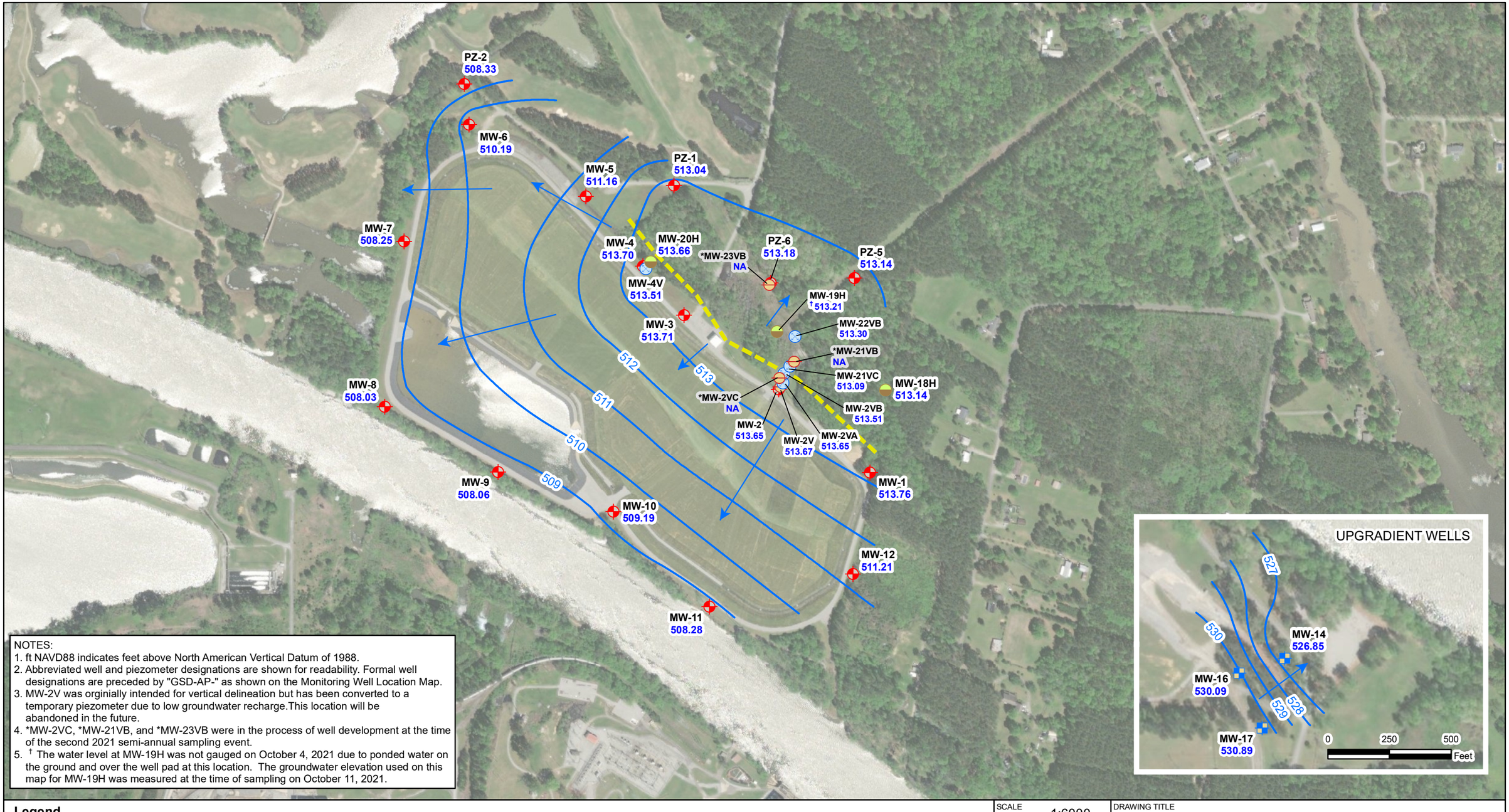
DRAWING TITLE

MONITORING WELL LOCATION MAP
PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 5

Southern Company



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
3. MW-2V was orginially intended for vertical delineation but has been converted to a temporary piezometer due to low groundwater recharge.This location will be abandoned in the future.
4. *MW-2VC, *MW-21VB, and *MW-23VB were in the process of well development at the time of the second 2021 semi-annual sampling event.
5. † The water level at MW-19H was not gauged on October 4, 2021 due to ponded water on the ground and over the well pad at this location. The groundwater elevation used on this map for MW-19H was measured at the time of sampling on October 11, 2021.

Legend

- Downgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Groundwater Divide
- **MW-1** Well ID
  513.76 Groundwater Elevation

N

0 500 1,000 2,000 Feet

SCALE	1:6000
DATE	6/23/2022
DRAWN BY	KAR
TECH REVIEW	KWR
CHECKED BY	GBD

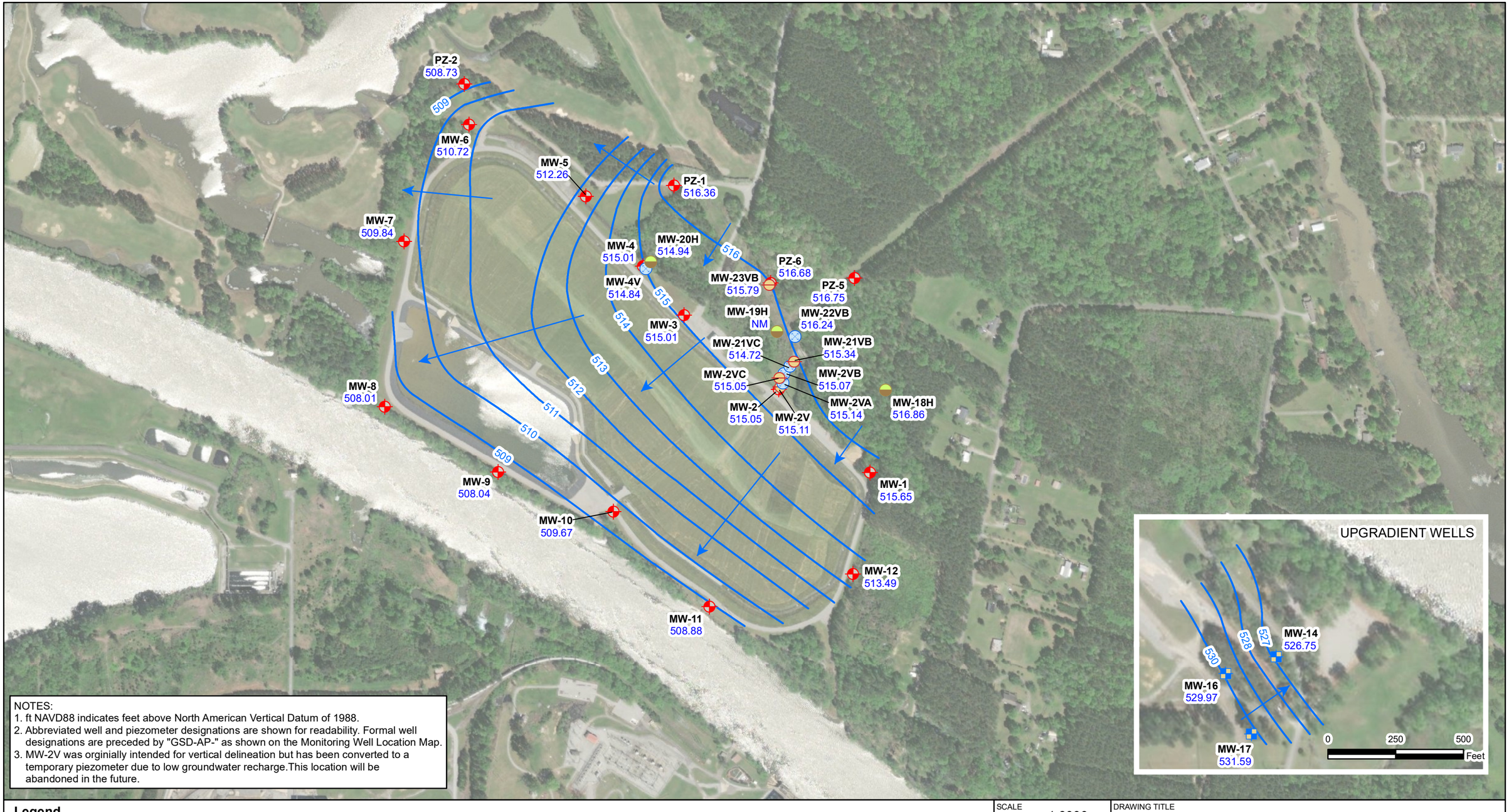
DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP OCTOBER 4, 2021 PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 6A

Southern Company



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
3. MW-2V was orginially intended for vertical delineation but has been converted to a temporary piezometer due to low groundwater recharge.This location will be abandoned in the future.

Legend

- Downgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction

MW-1 Well ID
516.18 Groundwater Elevation

N

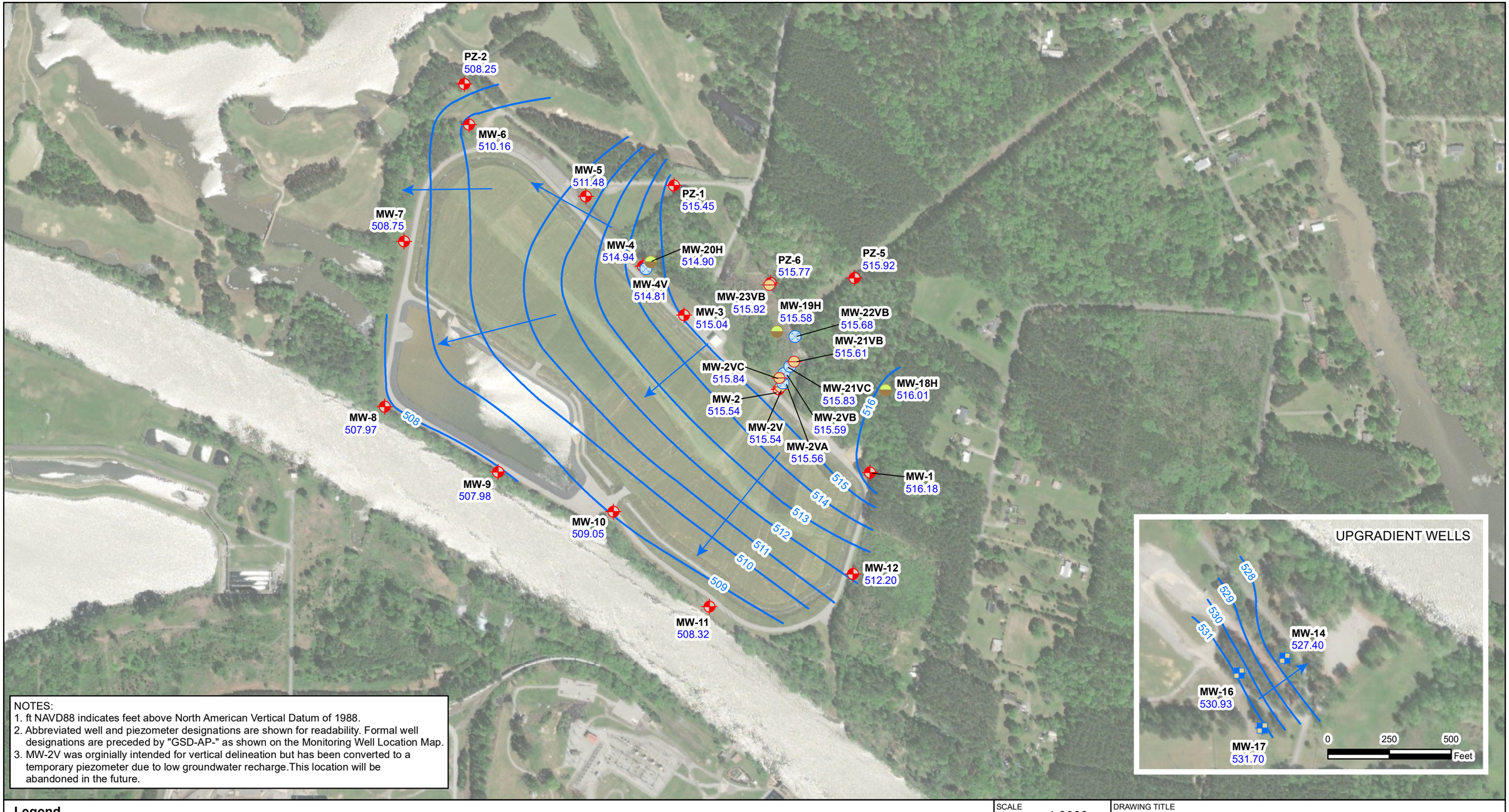
0 500 1,000 2,000 Feet

SCALE	1:6000
DATE	7/19/2022
DRAWN BY	KAR
CHECKED BY	GFB

DRAWING TITLE
POTENTIOMETRIC SURFACE CONTOUR MAP
JANUARY 11, 2022
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 6B

Southern Company



NOTES:
1. ft NAVD88 indicates feet above North American Vertical Datum of 1988.
2. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
3. MW-2V was orginially intended for vertical delineation but has been converted to a temporary piezometer due to low groundwater recharge.This location will be abandoned in the future.

Legend

- Downgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction

MW-1 Well ID
516.18 Groundwater Elevation

N

0 500 1,000 2,000 Feet

SCALE	1:6000
DATE	7/19/2022
DRAWN BY	KAR
CHECKED BY	GFB

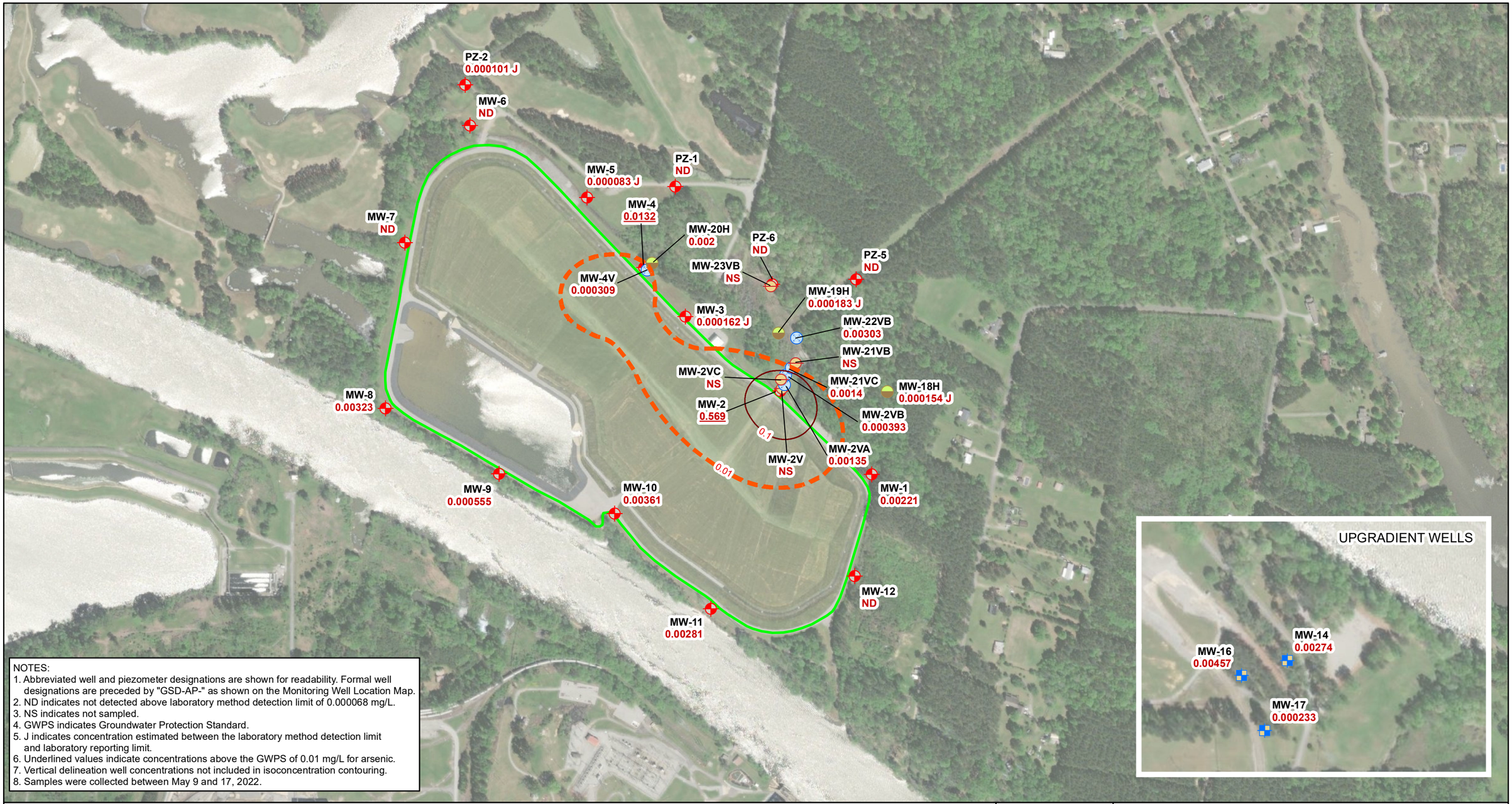
DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP MAY 5, 2022 PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 6C

Southern Company



NOTES:
1. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
2. ND indicates not detected above laboratory method detection limit of 0.000068 mg/L.
3. NS indicates not sampled.
4. GWPS indicates Groundwater Protection Standard.
5. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
6. Underlined values indicate concentrations above the GWPS of 0.01 mg/L for arsenic.
7. Vertical delineation well concentrations not included in isoconcentration contouring.
8. Samples were collected between May 9 and 17, 2022.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Approximate Arsenic Groundwater Protection Standard Contour (0.01 mg/L)
- Arsenic Concentration Contour (mg/L)
- Ash Pond Boundary
- **MW-11** Well ID
- 0.00281 Arsenic Concentration (mg/L)

N

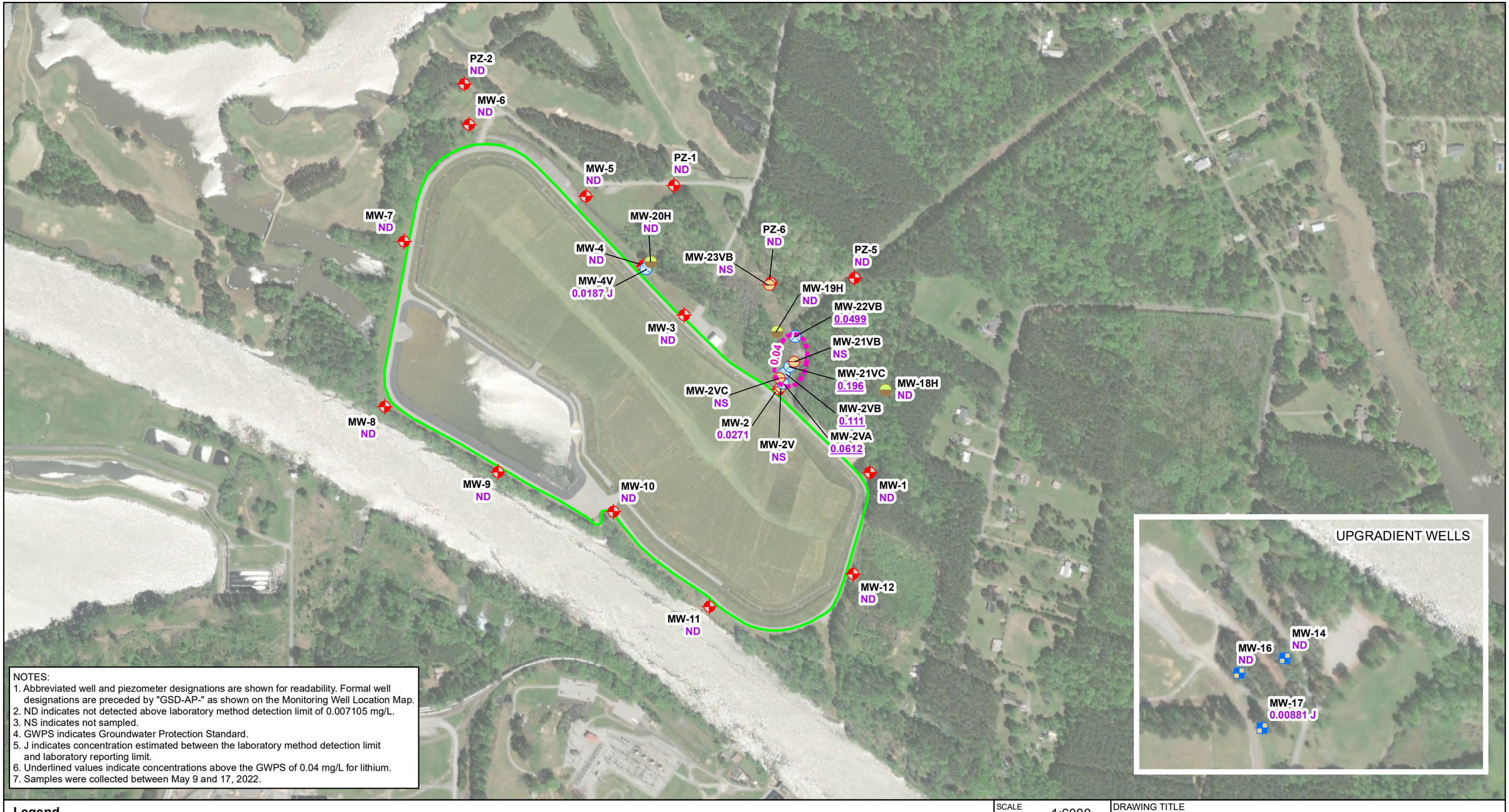
0 250 500 1,000 1,500 Feet

SCALE	1:6000
DATE	7/12/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

DRAWING TITLE
ARSENIC ISOCONCENTRATION MAP
MAY 2022
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 7

Southern Company



NOTES:
1. Abbreviated well and piezometer designations are shown for readability. Formal well designations are preceded by "GSD-AP-" as shown on the Monitoring Well Location Map.
2. ND indicates not detected above laboratory method detection limit of 0.007105 mg/L.
3. NS indicates not sampled.
4. GWPS indicates Groundwater Protection Standard.
5. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
6. Underlined values indicate concentrations above the GWPS of 0.04 mg/L for lithium.
7. Samples were collected between May 9 and 17, 2022.

Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Horizontal Delineation Well
- Vertical Delineation Well
- Piezometer
- Approximate Lithium Groundwater Protection Standard Contour (0.04 mg/L)
- Ash Pond Boundary

MW-2 Well ID
0.0226 Lithium Concentration (mg/L)

N

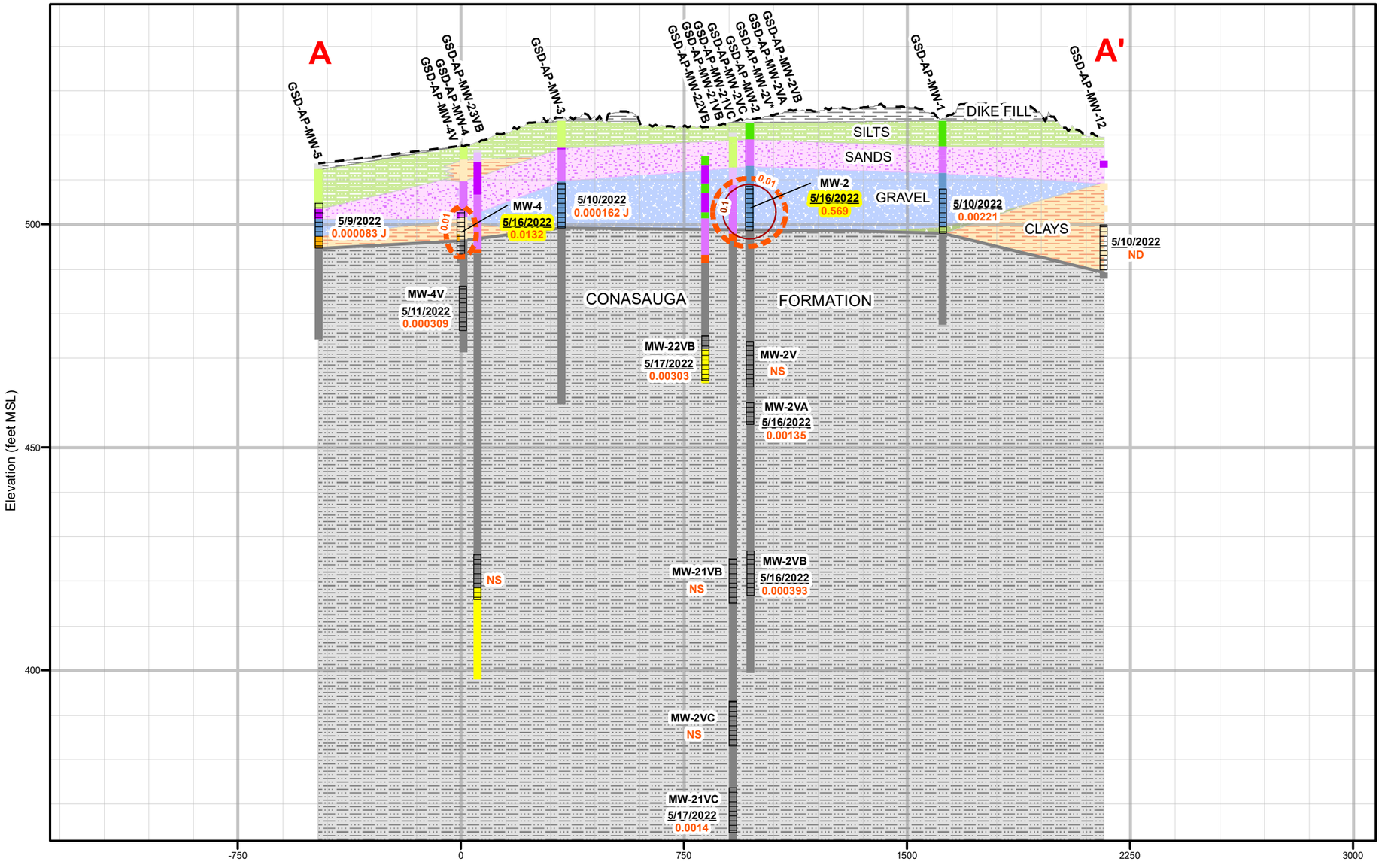
0 250 500 1,000 1,500 Feet

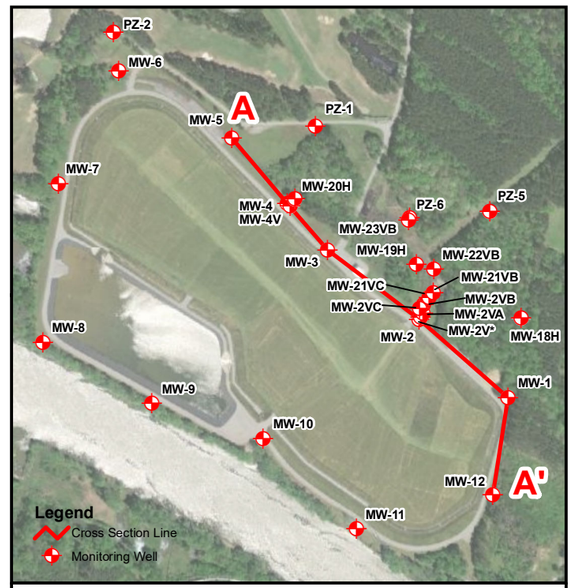
SCALE	1:6000
DATE	7/13/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

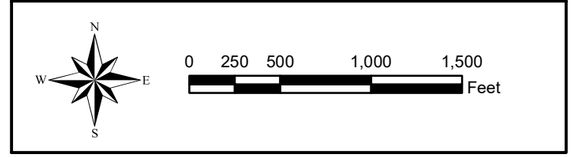
DRAWING TITLE
LITHIUM ISOCONCENTRATION MAP
MAY 2022
PLANT GADSDEN ASH POND

FIGURE NO
FIGURE 8

Southern Company







Notes:
1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. Groundwater samples were collected between May 9 and 17, 2022.
6. ND indicates not detected above laboratory method detection limit of 0.000068 mg/L.
7. NS indicates not sampled.
8. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
9. GWPS indicates Groundwater Protection Standard.
10. Highlighted values indicate concentrations above the GWPS of 0.01 mg/L for arsenic.

Legend

- Approximate Arsenic Groundwater Protection Standard Contour (0.01 mg/L)
- Arsenic Isoconcentration Contour (mg/L)
- Screen Interval
- Ground Surface Elevation
- Unit Boundary
- 0.00303 As Concentration (mg/L)

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4600
DATE	7/13/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

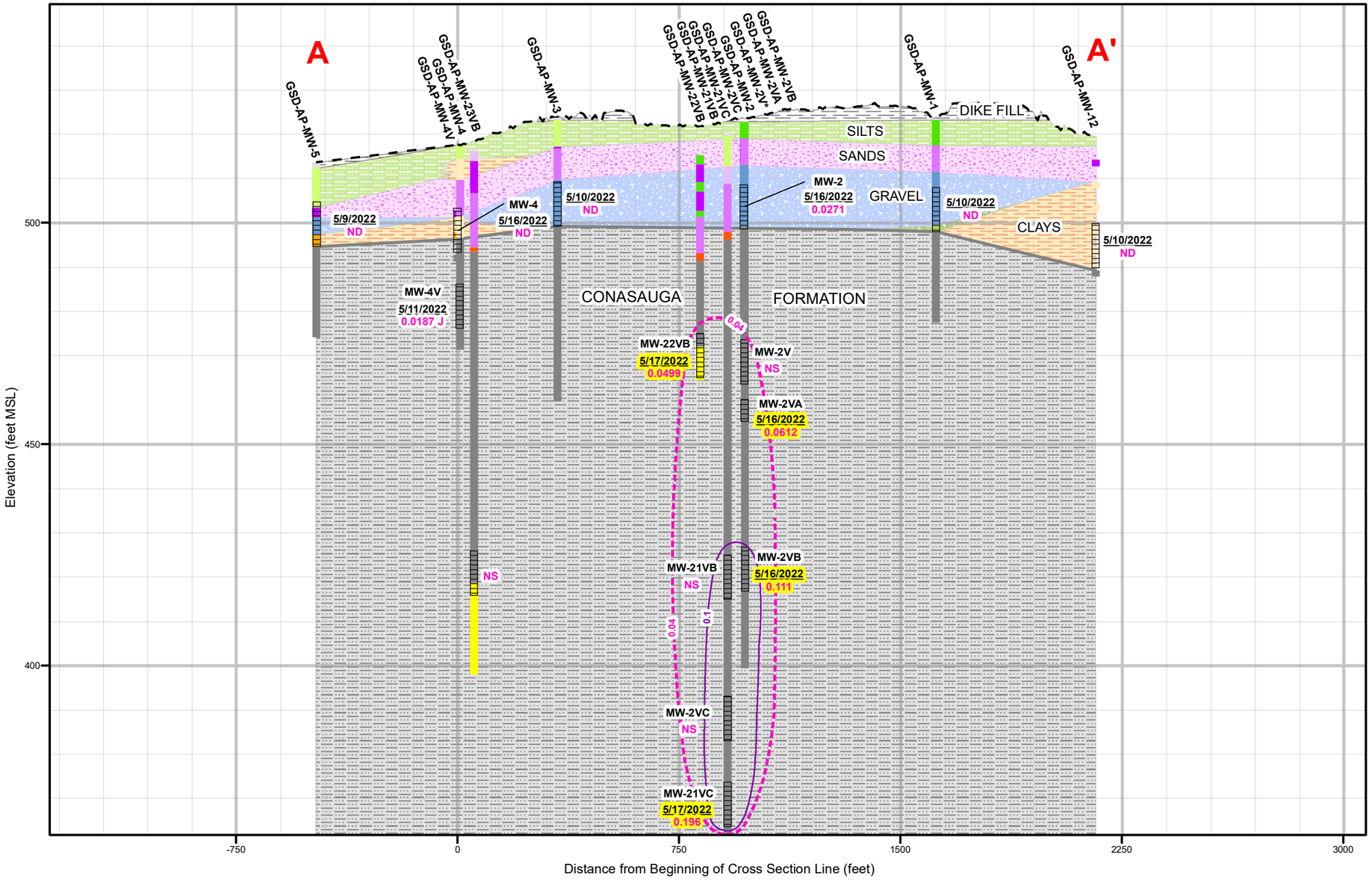
DRAWING TITLE

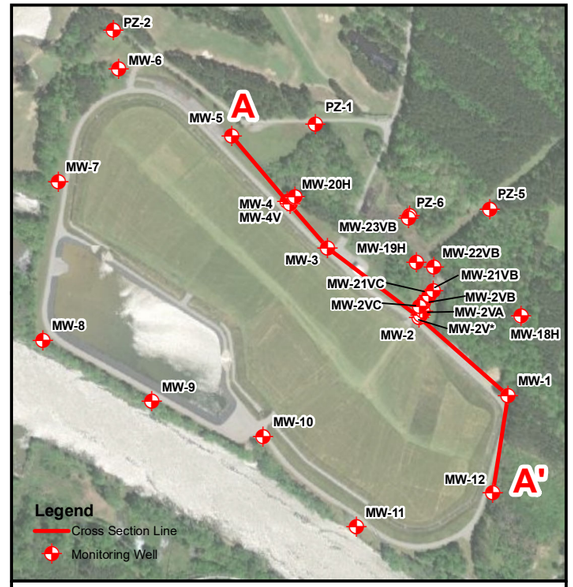
ARSENIC CONCENTRATIONS ALONG GEOLOGIC CROSS-SECTION A - A' PLANT GADSDEN ASH POND

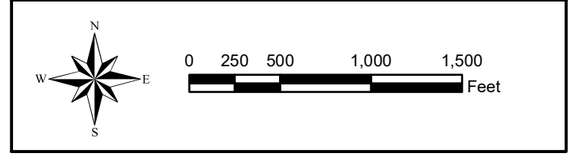
FIGURE NO

FIGURE 9

Southern Company







Notes:
1. Stratagraphic layers were correlated using boring data.
2. Elevation data are reported using feet above Mean Sea Level (MSL).
3. Vertical exaggeration is 15x.
4. *GSD-AP-MW-2V is utilized for water levels only and was not sampled.
5. Groundwater samples were collected between May 9 and 17, 2022.
6. ND indicates not detected above laboratory method detection limit of 0.007105 mg/L.
7. NS indicates not sampled.
8. J indicates concentration estimated between the laboratory method detection limit and laboratory reporting limit.
9. GWPS indicates Groundwater Protection Standard.
10. Highlighted values indicate concentrations above the GWPS of 0.04 mg/L for lithium.

Legend

- Approximate Lithium Groundwater Protection Standard Contour (0.04 mg/L)
- Lithium Isoconcentration Contour (mg/L)
- Screen Interval
- Ground Surface Elevation
- Unit Boundary
- 0.0499 Lithium Concentration (mg/L)

Borehole Descriptions

- Topsoil/Fill
- Lean and Sandy Lean Clay
- Fat Clay
- Silty Clay
- Silt
- Sandy Silt
- Silty Sand
- Well-graded Sand
- Poorly-graded Sands
- Clay, Sand, and Gravel Mix
- Well-graded Gravel
- Mudstone/Shale
- Dolomite or Limestone

Geologic Units

- Dike Fill
- Clays
- Silts
- Sands
- Gravel
- Undifferentiated Clay, Sand, and Gravel
- Mudstone/Shale

HORIZONTAL SCALE	1:4600
DATE	7/13/2022
DRAWN BY	KWR
TECH REVIEW	KAR
CHECKED BY	GBD

DRAWING TITLE

LITHIUM CONCENTRATIONS ALONG GEOLOGIC CROSS-SECTION A - A' PLANT GADSDEN ASH POND

FIGURE NO

FIGURE 10

Southern Company

Appendix A

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-14														
		06/27/2018	07/18/2018	08/06/2018	09/05/2018	09/24/2018	10/24/2018	12/05/2018	02/05/2019	02/28/2019	08/20/2019	04/16/2020	08/25/2020	03/22/2021	10/12/2021	5/9/2022
Appendix III																
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	16.6	15.3	13.8	12.1	11.8	10.2	9.14	15.1	21.4	14.4	20.1	13.1	12.2	11.8	14.5
Chloride	mg/L	3.1	3.4	2.8	2.8	3.1	2.8	2.2	3.12	3.45	3.27	3.74	3.03	3.15	2.87	3
Fluoride	mg/L	0.18	0.23	0.23	0.22	0.2	0.14	0.07 J	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	4	3.93	4.03	3.25	4.04	3.6
Sulfate	mg/L	120	120	110	86	80	68	54	126	207	106	191	98.4	83.8	95.7	125
TDS	mg/L	219	195	175	153	127	125	101	180	287	265	280	160	126	132	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00165 J	0.00117 J	<0.001	<0.001	0.00148 J	<0.001	<0.001	0.00119 J	--	0.00216 J	0.00483 J	0.002 J	0.00188	0.00137	0.00274
Barium	mg/L	0.0338	0.03	0.0274	0.0275	0.0264	0.0276	0.0256	0.0314	--	0.0274	0.0327	0.0291	0.0254	0.0268	0.0365
Beryllium	mg/L	0.00134 J	0.00133 J	0.00129 J	0.00106 J	0.000991 J	0.00082 J	0.00141 J	0.0011 J	--	0.00129 J	0.00157 J	0.00117 J	0.000918 J	0.00115	0.00126
Cadmium	mg/L	0.00064 J	0.000679 J	0.000536 J	0.000479 J	0.00039 J	0.000436 J	0.000307 J	0.000515 J	--	0.000622 J	0.00101	0.000584 J	0.000407	0.000505	0.000627
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000771 J	0.00061 J	0.000868 J
Cobalt	mg/L	0.0382	0.0366	0.0308	0.0291	0.0286	0.0269	0.0215	0.0359	--	0.0391	0.056	0.0365	0.0262	0.0288	0.0416
Combined Radium 226 + 228	pCi/L	0.616	0.859	0.654	0.855	0.787	1.14	0.64	0.873	--	0.774	0.865	0.976	1.04	1.61	1.31
Fluoride	mg/L	0.18	0.23	0.23	0.22	0.2	0.14	0.07 J	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	0.00158 J	0.00152 J	0.00143 J	0.00118 J	0.00156 J	0.00121 J	0.00117 J	0.00156 J	--	0.00176 J	0.00258 J	0.0018 J	0.00143	0.00151	0.00194
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	0.000661	0.000398 J	0.00042 J	0.00037 J	0.000329 J	<0.00025	0.000253 J	0.000664	--	0.000301 J	0.000558	<0.0003	0.000363 J	<0.0003	0.00039 J
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00208 J	0.00387 J	--	0.00328 J	0.00608 J	0.00247 J	0.00488	0.00287	0.00394
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-10														
		12/06/2017	02/07/2018	04/24/2018	06/27/2018	08/07/2018	10/22/2018	12/04/2018	02/06/2019	02/26/2019	08/22/2019	04/15/2020	08/26/2020	03/23/2021	10/11/2021	5/10/2022
Appendix III																
Boron	mg/L	0.135	0.12	0.144	0.0903 J	0.106	0.107	0.103	0.105	0.146	0.0951 J	0.164	0.108	0.188	0.09 J	0.097 J
Calcium	mg/L	42	47.6	50.1	37.1	37.4	36.3	42.1	41.3	53.3	38.5	54.1	37.8	57	38.2	42.2
Chloride	mg/L	6.9	6.1	--	5.6	5.1	5.5	5.6	6.24	8.28	5.66	6.49	5.39	7.14	5.72	5.72
Fluoride	mg/L	0.09 J	0.08 J	--	0.09 J	0.04 J	0.1	0.07 J	0.107	0.0813 J	0.084 J	0.112	0.0997 J	0.101	0.201	0.0918 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.37	6.85	6.73	6.87	6.72	6.39
Sulfate	mg/L	11	19	--	<1.4	<1.4	<1.4	11	16.8	38.4	6.74	50.7	10.5	60.1	7.75	11.6
TDS	mg/L	215	237	242	194	195	184	215	208	252	194	262	186	273	190	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00247 J	0.00192 J	0.00218 J	0.00419 J	0.00365 J	0.00404 J	**0.00332 J**	0.00333 J	--	0.00394 J	0.00236 J	0.00422 J	0.00163	0.0037	0.00361
Barium	mg/L	0.308	0.289	0.359	0.307	0.25	0.29	0.305	0.265	--	0.302	0.35	0.322	0.395	0.292	0.318
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00035 J	0.000285 J	0.000305 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00037	0.000886	0.000907
Combined Radium 226 + 228	pCi/L	0.585 U	0.474	0.463 U	0.678	0.495 U	0.36 U	0.407 U	0.537	--	-0.021 U	0.64 U	0.221 U	0.83 U	6.52	0.421 U
Fluoride	mg/L	0.09 J	0.08 J	--	0.09 J	0.04 J	0.1	0.07 J	0.107	0.0813 J	0.084 J	0.112	0.0997 J	0.101	0.201	0.0918 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	0.000302 J	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000204	0.000451	0.000466
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-16														
		10/24/2018	11/14/2018	11/28/2018	12/05/2018	12/18/2018	01/03/2019	01/24/2019	02/05/2019	02/28/2019	08/19/2019	04/15/2020	08/25/2020	03/22/2021	10/06/2021	5/17/2022
Appendix III																
Boron	mg/L	0.0261 J	0.0209 J	0.0239 J	<0.02	<0.02	--	0.0271 J	0.0245 J	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	18	14.9	14.8	14.8	16.4	--	19.6	20.8	21.5	12.8	13.1	12.2	18.4	13.4	19.7
Chloride	mg/L	3.3	3.6	3.5	3.3	3.6	3.4	3.91	3.94	4.15	3.42	3.39	2.94	3.61	3.17	3.58
Fluoride	mg/L	0.11	0.1	0.1	0.11	0.14	0.16	<0.05	<0.05	<0.05	<0.05	<0.06	0.0863 J	<0.06	<0.06	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	4.57	4.49	4.2	3.45	4.16	4.34
Sulfate	mg/L	44	44	46	51	76	94	135	183	192	66.6	92.8	74.1	128	93.5	139
TDS	mg/L	107	96.7	102	103	126	--	212	269	261	121	155	131	204	136	--
Appendix IV																
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	0.000922 J	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	0.00124 J	0.00113 J	0.00113 J	--	0.00257 J	0.00355 J	--	0.00228 J	0.0034 J	0.00237 J	0.00614	0.00207	0.00457
Barium	mg/L	0.0499	0.0458	0.0476	0.0475	0.0461	--	0.0485	0.0354	--	0.0314	0.028	0.0261	0.0278	0.0215	0.0288
Beryllium	mg/L	<0.0006	<0.0006	0.00133 J	<0.0006	0.000761 J	--	0.000703 J	0.000711 J	--	<0.0006	<0.0006	<0.0006	0.000537 J	0.000487 J	0.000606 J
Cadmium	mg/L	0.000307 J	0.000417 J	0.000387 J	0.000317 J	0.000438 J	--	0.000736 J	0.00101	--	0.000499 J	0.000697 J	0.000507 J	0.000852	0.00068	0.00108
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000546 J	0.000455 J	0.000589 J
Cobalt	mg/L	0.0129	0.0114	0.0168	0.0161	0.0234	--	0.04	0.0538	--	0.0247	0.0373	0.0294	0.0469	0.0321	0.0563
Combined Radium 226 + 228	pCi/L	0.564	-0.0027 U	0.222 U	0.288 U	0.822	0.844	0.162 U	0.431 U	--	0.377 U	0.449 U	0.851	0.942 U	1.16 U	1.01
Fluoride	mg/L	0.11	0.1	0.1	0.11	0.14	0.16	<0.05	<0.05	<0.05	<0.05	<0.06	0.0863 J	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	0.00114 J	0.00135 J	--	<0.001	<0.001	0.0011 J	0.0016	0.00116	0.00178
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	0.000411 J	0.000473 J	--	<0.0003	<0.0003	<0.0003	0.000775	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	0.00349 J	0.00395 J	--	0.00707 J	0.00938 J	--	0.00316 J	0.00434 J	0.00262 J	0.0134	0.00262	0.00609
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-11														
		12/06/2017	02/07/2018	04/24/2018	06/27/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/22/2019	04/14/2020	08/26/2020	03/23/2021	10/12/2021	5/17/2022
Appendix III																
Boron	mg/L	0.12	0.109	0.124	0.111	0.135	0.114	0.124	0.112	0.14	0.272	0.154	0.257	0.142	0.125	0.139
Calcium	mg/L	70	72.4	72.3	73.1	76	70.2	74	73.1	82.2	133	82.4	111	75.9	78.6	80.6
Chloride	mg/L	6.3	5.4	--	5.4	5.2	5.4	5.3	5.89	6.2	4.64	5.46	4.74	5.54	5.8	5.92
Fluoride	mg/L	0.06 J	0.05 J	--	0.06 J	0.06 J	0.06 J	<0.032	0.0678 J	0.0985 J	<0.05	0.0878 J	<0.06	0.0819 J	0.134	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.26	6.63	6.38	6.58	6.66	6.44
Sulfate	mg/L	83	84	--	95	110	78	97	113	135	305	146	280	135	142	145
TDS	mg/L	312	323	324	333	346	311	343	317	360	555	372	517	361	352	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00279 J	0.00252 J	0.00283 J	0.00289 J	0.00265 J	0.00287 J	0.00271 J	0.00272 J	--	0.00229 J	0.00286 J	0.00246 J	0.00275	0.00272	0.00281
Barium	mg/L	0.349	0.297	0.338	0.338	0.307	0.311	0.331	0.286	--	0.214	0.168	0.165	0.169	0.17	0.195
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000513 J	0.000267 J	0.000385 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	0.00756	<0.002	0.00599	0.000388	0.000275	0.00044
Combined Radium 226 + 228	pCi/L	0.891 U	0.786	0.935	0.537	1.28	1.3	1.05	0.779	--	1.34 U	0.922 U	1.28	0.592 U	1.02 U	1.01 U
Fluoride	mg/L	0.06 J	0.05 J	--	0.06 J	0.06 J	0.06 J	<0.032	0.0678 J	0.0985 J	<0.05	0.0878 J	<0.06	0.0819 J	0.134	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000124 J	0.000152 J	0.000121 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-12														
		12/06/2017	02/08/2018	04/24/2018	06/27/2018	08/08/2018	10/23/2018	12/05/2018	02/06/2019	02/27/2019	08/22/2019	04/14/2020	08/26/2020	03/23/2021	10/05/2021	5/10/2022
Appendix III																
Boron	mg/L	0.0605 J	0.0527 J	0.0476 J	0.0539 J	0.0637 J	0.0696 J	0.0652 J	0.051 J	0.0494 J	0.0625 J	0.0377 J	0.0698 J	0.0452 J	0.0661 J	0.066 J
Calcium	mg/L	49	50	50.5	56.3	65.7	68.3	64.3	52.3	60.2	89.4	40	68.4	42	55.8	48.2
Chloride	mg/L	6.2	6.1	--	5.5	5.3	5.8	6	5.92	5.88	6.31	5.74	5.91	6.3	6.26	5.64
Fluoride	mg/L	<0.032	<0.032	--	<0.032	<0.032	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	5.35	5.39	5.63	5.5	5.19	4.78
Sulfate	mg/L	200	200	--	240	260	280	280	249	257	339	155	282	160	195	193
TDS	mg/L	371	367	365	421	479	507	479	385	422	501	278	472	286	378	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.0501	0.0375	0.0405	0.0466	0.0448	0.054	0.0493	0.0357	--	0.0455	0.0279	0.0503	0.0315	0.0417	0.0377
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	0.000596 J	0.00064 J	0.000702 J	0.000732 J	0.000587 J	0.000552 J	0.000661 J	0.000601 J	--	0.000755 J	0.000425 J	0.000618 J	0.000405	0.000367	0.000332
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000431 J	0.000339 J	0.000414 J
Cobalt	mg/L	0.00221 J	0.00221 J	0.00257 J	0.00266 J	0.00251 J	0.00399 J	0.00466 J	0.00475 J	--	0.00658	0.0035 J	0.00547	0.00378	0.00448	0.0049
Combined Radium 226 + 228	pCi/L	0.435 U	0.477	0.695	0.183 U	0.817	0.796	0.498 U	-0.0241 U	--	0.145 U	0.643 U	1.31	0.565 U	1.48	0.531 U
Fluoride	mg/L	<0.032	<0.032	--	<0.032	<0.032	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-17														
		10/24/2018	11/14/2018	11/28/2018	12/05/2018	12/18/2018	01/03/2019	01/24/2019	02/05/2019	02/28/2019	08/19/2019	04/16/2020	08/24/2020	03/22/2021	10/06/2021	5/9/2022
Appendix III																
Boron	mg/L	0.0357 J	0.0348 J	0.0313 J	0.0363 J	0.033 J	--	0.0307 J	0.0306 J	0.0206 J	0.0341 J	0.0331 J	0.0303 J	0.0333 J	0.0305 J	0.0347 J
Calcium	mg/L	28.3	27.5	20.7	25.3	20.9	--	17	17.1	18.6	25.3	30.7	30.8	31	31	28.4
Chloride	mg/L	4	3.6	3.5	3.2	3.4	3.2	3.15	2.98	3.05	2.8	2.93	2.82	2.94	2.98	3.01
Fluoride	mg/L	0.23	0.2	0.19	0.19	0.15	0.19	0.168	0.192	0.182	0.187	0.166	0.163	0.18	0.175	0.191
pH_Field	pH	--	--	--	--	--	--	--	--	--	7.93	8.1	8.17	7.85	7.92	7.29
Sulfate	mg/L	16	13	11	12	11	10	10.2	10.4	9.86	8.74	11.5	10	10.6	10.2	10
TDS	mg/L	184	170	167	185	164	--	137	138	140	240	166	162	157	182	--
Appendix IV																
Antimony	mg/L	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00031	0.000263	0.000233
Barium	mg/L	0.218	0.203	0.191	0.209	0.199	--	0.206	0.168	--	0.259	0.257	0.312	0.29	0.307	0.309
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	0.00267 J	<0.002	0.000509 J	0.000273 J	0.000257 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000133 J	0.000126 J	0.000113 J
Combined Radium 226 + 228	pCi/L	0.694	0.398 U	0.428 U	0.302 U	0.535 U	0.64	0.331 U	0.307 U	--	0.683	0.603	0.404 U	0.497 U	2.01	0.56 U
Fluoride	mg/L	0.23	0.2	0.19	0.19	0.15	0.19	0.168	0.192	0.182	0.187	0.166	0.163	0.18	0.175	0.191
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	0.0111 J	0.0124 J	0.0121 J	--	0.0134 J	0.0126 J	--	<0.01	0.0127 J	<0.01	0.0083 J	0.00881 J	0.00859 J
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	--	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00507 J	0.00358 J	0.00322 J	0.00256 J	0.00215 J	--	0.00211 J	0.00205 J	--	<0.002	<0.002	<0.002	0.000723	0.000453	0.000465
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-1														
		12/06/2017	02/06/2018	04/23/2018	06/26/2018	08/07/2018	10/22/2018	12/04/2018	02/05/2019	02/26/2019	08/21/2019	04/15/2020	08/25/2020	03/16/2021	10/05/2021	5/10/2022
Appendix III																
Boron	mg/L	1.28	1.29	1.21	1.25	1.21	1.22	1.08	1.2	1.15	1.24	1.13	1.11	1.08	1.02	0.954
Calcium	mg/L	271	275	269	268	259	240	254	292	254	272	231	218	218	198	166
Chloride	mg/L	6.2	5.9	--	5.7	5.3	5.6	5.8	5.8	5.92	5.26	5.5	5.59	6.2	6.1	5.97
Fluoride	mg/L	0.1	0.08 J	--	0.08 J	0.07 J	0.07 J	0.04 J	0.0525 J	<0.05	<0.05	<0.06	<0.06	<0.06	0.0601 J	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.01	5.65	6	5.87	5.79	5.77
Sulfate	mg/L	650	560	--	670	660	580	580	702	748	708	647	642	593	567	508
TDS	mg/L	1300	1310	1210	1250	1220	1150	1090	1200	1210	1200	1060	1060	1040	964	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00179 J	0.00191 J	0.0023 J	0.00306 J	0.00336 J	0.00451 J	0.00471 J	0.00365 J	--	0.00444 J	0.00309 J	0.00435 J	0.0029	0.00356	0.00221
Barium	mg/L	0.0807	0.0546	0.0488	0.0479	0.0402	0.0427	0.0434	0.0439	--	0.037	0.0329	0.0358	0.0331	0.0304	0.0275
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	0.000102 J	0.000102 J	0.000216
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000376 J	0.000228 J	0.000254 J
Cobalt	mg/L	0.00818 J	0.0123	0.0204	0.0224	0.0193	0.0243	0.0166	0.0264	--	0.0242	0.0178	0.0193	0.0184	0.0169	0.0136
Combined Radium 226 + 228	pCi/L	0.694 U	0.641	-0.0527 U	0.162 U	0.87	0.691	0.213 U	0.637	--	0.643 U	0.538 U	0.502 U	0.722 U	1.21	0.761 U
Fluoride	mg/L	0.1	0.08 J	--	0.08 J	0.07 J	0.07 J	0.04 J	0.0525 J	<0.05	<0.05	<0.06	<0.06	<0.06	0.0601 J	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	0.000112 J	<6.8e-005	0.000129 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-2														
		12/06/2017	02/06/2018	04/23/2018	06/27/2018	08/07/2018	10/22/2018	12/04/2018	02/05/2019	02/26/2019	08/20/2019	04/15/2020	08/25/2020	03/24/2021	10/11/2021	5/16/2022
Appendix III																
Boron	mg/L	0.758	0.733	0.608	0.619	0.697	0.754	0.737	0.575	0.566	0.566	0.461	0.528	0.437	0.459	0.381
Calcium	mg/L	128	130	95.9	99.4	107	107	120	80.6	79.6	92.3	69.2	80.5	61.5	87.1	58.2
Chloride	mg/L	4.1	3.1	--	2.2	2.6	2.8	4.1	2.56	3.03	2.24	2.16	2	2.29	2.43	2.14
Fluoride	mg/L	0.3	0.27	--	0.28	0.24	0.24	0.15	0.207	0.264	0.252	0.21	0.273	0.194	0.283	0.264
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.3	6.45	6.65	6.49	6.59	6.16
Sulfate	mg/L	210	190	--	130	150	160	170	145	148	110	116	114	101	112	84.3
TDS	mg/L	574	572	414	440	485	484	504	366	372	369	300	339	287	337	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.809	0.774	0.643	1.01	0.988	1.01	0.553	0.74	--	0.825	0.709	0.727	0.489	0.424	0.569
Barium	mg/L	0.0842	0.0716	0.0518	0.0578	0.0566	0.0536	0.0589	0.0418	--	0.0685	0.0607	0.0812	0.0676	0.0807	0.0974
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	6.88e-005 J	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00047 J	0.000479 J	0.000342 J
Cobalt	mg/L	0.0246	0.0243	0.0258	0.0362	0.0332	0.0438	0.0252	0.0362	--	0.0366	0.0324	0.0298	0.0316	0.0165	0.0366
Combined Radium 226 + 228	pCi/L	0.772 U	0.679	0.447 U	0.117 U	1.22	0.996	0.739	1.09	--	0.553 U	0.182 U	0.43 U	0.769 U	2.38	1.06
Fluoride	mg/L	0.3	0.27	--	0.28	0.24	0.24	0.15	0.207	0.264	0.252	0.21	0.273	0.194	0.283	0.264
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	9.28e-005 J	<6.8e-005
Lithium	mg/L	0.092	0.0817	0.051	0.0734	0.0764	0.0804	0.0474	0.0545	--	0.0583	0.0406	0.041	0.0318	0.0225	0.0271
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.0254	0.0239	0.0165	0.0302	0.0209	0.0198	0.0118	0.0196	--	0.027	0.0202	0.0269	0.0164	0.0204	0.0201
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000213 J	<0.0002	0.000256 J	--	0.000322 J	0.000318 J	0.000347 J	0.00037	0.000294	0.000414

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-3														
		12/06/2017	02/06/2018	04/24/2018	06/27/2018	08/07/2018	10/22/2018	12/03/2018	02/05/2019	02/25/2019	08/20/2019	04/13/2020	08/26/2020	03/22/2021	10/05/2021	5/10/2022
Appendix III																
Boron	mg/L	0.959	1.04	0.979	0.982	1	1.08	1.05	1.01	1.08	1.06	1.19	1.16	1.13	1.01	0.998
Calcium	mg/L	125	110	88.8	80.8	88.5	92.7	105	68.6	70.6	74.1	69.5	75.7	64.9	65.9	58.5
Chloride	mg/L	7.6	7.6	--	7.3	7.6	6.9	6.8	6.95	6.55	6.07	5.95	5.89	5.26	5.09	4.59
Fluoride	mg/L	0.13	0.08 J	--	0.07 J	0.09 J	0.11	0.08 J	0.064 J	<0.05	0.0592 J	<0.06	<0.06	<0.06	<0.06	0.0714 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	5.73	5.83	5.87	5.51	5.76	5.95
Sulfate	mg/L	250	230	--	230	200	190	200	263	246	222	256	246	254	228	215
TDS	mg/L	628	556	510	486	487	450	492	428	441	416	433	455	427	389	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00101 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.0002 J	0.000207	0.000162 J
Barium	mg/L	0.126	0.0721	0.0492	0.0453	0.0431	0.0541	0.0545	0.0363	--	0.0405	0.0349	0.0363	0.0354	0.0344	0.0287
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	0.000438 J	<0.0003	0.00039	0.000213	0.00035
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000293 J	0.000234 J	0.000286 J
Cobalt	mg/L	0.0302	0.0371	0.0251	0.0234	0.0223	0.03	0.0238	0.0232	--	0.0257	0.0209	0.0191	0.0183	0.016	0.0147
Combined Radium 226 + 228	pCi/L	0.643 U	0.209 U	0.596	0.363 U	0.788	0.749	0.749	0.299 U	--	0.709 U	0.942 U	0.177 U	0.263 U	3.21	0.189 U
Fluoride	mg/L	0.13	0.08 J	--	0.07 J	0.09 J	0.11	0.08 J	0.064 J	<0.05	0.0592 J	<0.06	<0.06	<0.06	<0.06	0.0714 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	0.000121 J	0.000136 J	0.000113 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-4														
		12/07/2017	02/06/2018	04/24/2018	06/26/2018	08/06/2018	10/22/2018	12/03/2018	02/05/2019	02/26/2019	08/20/2019	04/15/2020	08/26/2020	03/24/2021	10/05/2021	5/16/2022
Appendix III																
Boron	mg/L	0.515	0.541	0.475	0.444	0.474	0.496	0.51	0.43	0.411	0.399	0.344	0.398	0.326	0.347	0.342
Calcium	mg/L	30.1	30.6	27.8	26.2	27.5	27.7	32.3	25.5	26.4	23.5	22	22.8	23.1	27.8	30.7
Chloride	mg/L	8.5	8.8	--	8.7	11	8.6	9.1	9.81	13	9.62	9.27	8.96	8.61	9.83	8.19
Fluoride	mg/L	0.25	0.24	--	0.22	0.22	0.24	0.22	0.259	0.246	0.197	0.238	0.251	0.227	0.214	0.17
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.33	6.77	6.68	6.86	6.58	6.61
Sulfate	mg/L	<1.4	<1.4	--	<1.4	<1.4	<1.4	<1.4	5.38	5.1	7.34	17.2	15.5	19.9	36.9	49.4
TDS	mg/L	189	206	193	180	182	204	168	158	191	164	170	168	180	197	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.0132	0.0105	0.0124	0.0132	0.013	0.0144	0.0119	0.0107	--	0.0141	0.0121	0.0133	0.011	0.0147	0.0132
Barium	mg/L	0.239	0.206	0.217	0.208	0.189	0.209	0.214	0.173	--	0.188	0.159	0.181	0.171	0.208	0.23
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000323 J	0.000224 J	0.000227 J
Cobalt	mg/L	0.0252	0.0243	0.027	0.0242	0.0205	0.0259	0.0228	0.0263	--	0.0293	0.0252	0.0231	0.0268	0.0238	0.0289
Combined Radium 226 + 228	pCi/L	1.04 U	0.989	0.405 U	1.03	0.622	1.06	0.697	0.467 U	--	0.814	-0.0841 U	0.26 U	0.664 U	1.75	0.978
Fluoride	mg/L	0.25	0.24	--	0.22	0.22	0.24	0.22	0.259	0.246	0.197	0.238	0.251	0.227	0.214	0.247
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00118	0.00111	0.00122
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-5														
		12/07/2017	02/06/2018	04/25/2018	06/27/2018	08/07/2018	10/23/2018	12/05/2018	02/05/2019	02/27/2019	08/20/2019	04/13/2020	08/24/2020	03/16/2021	10/05/2021	5/9/2022
Appendix III																
Boron	mg/L	0.566	0.614	0.498	0.446	0.442	0.436	0.456	0.453	0.457	0.378	0.359	0.329	0.328	0.26	0.261
Calcium	mg/L	48.2	47.8	41.8	36.9	37.6	35.3	36.3	36.6	39.6	33.7	43	35.5	38.1	35.9	38.4
Chloride	mg/L	8.7	8.5	--	7.1	6.9	6.7	6.7	7.24	7.38	6.53	6.48	6.64	7.14	6.78	6.81
Fluoride	mg/L	0.06 J	0.05 J	--	0.06 J	0.06 J	0.07 J	0.04 J	0.0651 J	0.0578 J	0.0567 J	0.0688 J	0.0607 J	0.065 J	0.122	0.0682 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.11	6.18	6.11	6.22	6.24	5.43
Sulfate	mg/L	19	20	--	18	20	18	20	24.3	24.7	21.3	21.9	21.2	18.8	14.5	15.5
TDS	mg/L	215	204	192	180	183	169	177	198	185	174	192	175	184	180	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	8.17e-005 J	0.000133 J	8.3e-005 J
Barium	mg/L	0.279	0.195	0.26	0.249	0.216	0.26	0.245	0.215	--	0.238	0.241	0.238	0.217	0.221	0.236
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000397 J	0.000281 J	0.000529 J
Cobalt	mg/L	0.00331 J	0.00323 J	0.00258 J	0.00218 J	<0.002	0.0023 J	0.00233 J	0.0021 J	--	0.00223 J	<0.002	0.00222 J	0.00136	0.00108	0.00101
Combined Radium 226 + 228	pCi/L	0.885 U	0.524	0.341 U	0.546	1.09	1.01	0.876	0.551 U	--	0.206 U	1.19	0.482 U	0.709 U	1.44	1.16
Fluoride	mg/L	0.06 J	0.05 J	--	0.06 J	0.06 J	0.07 J	0.04 J	0.0651 J	0.0578 J	0.0567 J	0.0688 J	0.0607 J	0.065 J	0.122	0.0682 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	0.00015 J	0.000114 J
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-6														
		12/07/2017	02/08/2018	04/25/2018	06/26/2018	08/07/2018	10/23/2018	12/03/2018	02/05/2019	02/26/2019	08/20/2019	04/13/2020	08/26/2020	03/17/2021	10/05/2021	5/10/2022
Appendix III																
Boron	mg/L	0.063 J	0.0508 J	0.0548 J	0.0571 J	0.0571 J	0.0636 J	0.0568 J	0.0517 J	0.0491 J	0.0608 J	0.0561 J	0.0633 J	0.0563 J	0.0649 J	0.0681 J
Calcium	mg/L	29.8	24.3	19.8	17.8	18.3	18.1	16.6	14.4	16	15.1	12.5	12.9	11.3	11.4	10.8
Chloride	mg/L	10	9.5	--	9.5	9	9.9	8.7	8.76	8.63	9.55	8.6	9.21	8.59	9.09	8.87
Fluoride	mg/L	0.06 J	0.04 J	--	0.05 J	0.05 J	0.06 J	<0.032	0.0583 J	0.0618 J	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	5.4	5.82	5.96	5.92	5.74	5.51
Sulfate	mg/L	10	11	--	11	12	11	12	13.7	14	12.3	13.9	13.1	13.7	14.2	14.8
TDS	mg/L	136	122	102	106	71.3	105	102	86.7	91.3	98.7	90.7	91.3	80	96.7	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.0809	0.0566	0.0553	0.0604	0.0542	0.0608	0.0633	0.05	--	0.0731	0.0635	0.0771	0.0656	0.0741	0.0762
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000338 J	0.000246 J	<0.000203
Cobalt	mg/L	0.00592 J	0.00297 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00102	0.00104	0.00114
Combined Radium 226 + 228	pCi/L	0.394 U	0.489	-0.0902 U	0.245 U	0.439 U	0.243 U	0.304 U	0.196 U	--	-0.086 U	0.0901 U	0.416 U	0.539 U	1.36	0.0979 U
Fluoride	mg/L	0.06 J	0.04 J	--	0.05 J	0.05 J	0.06 J	<0.032	0.0583 J	0.0618 J	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-7														
		12/07/2017	02/08/2018	04/25/2018	06/26/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/21/2019	04/15/2020	08/26/2020	03/23/2021	10/05/2021	5/10/2022
Appendix III																
Boron	mg/L	0.102	0.0787 J	0.0734 J	0.094 J	0.103	0.106	0.085 J	0.0733 J	0.0548 J	0.091 J	0.0534 J	0.0665 J	0.0587 J	0.0673 J	0.0465 J
Calcium	mg/L	23.4	20.1	17.4	21.8	25.4	25.6	19	16.4	15.6	23.5	14	16.7	12.5	15.9	9.95
Chloride	mg/L	7.9	6.7	--	7.4	7.7	8	6.7	6.84	6.21	7.35	4.99	6.19	4.87	6.43	3.96
Fluoride	mg/L	0.09 J	0.07 J	--	0.09 J	0.1	0.1	0.06 J	<0.05	0.0824 J	0.068 J	0.0775 J	<0.06	<0.06	0.0933 J	0.0627 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	5.97	6.16	6.11	6.04	6.06	5.08
Sulfate	mg/L	14	10	--	11	13	13	9.8	10.8	8.98	11.8	7.95	9.19	8.08	9.19	7.13
TDS	mg/L	137	124	106	129	142	142	121	108	103	133	102	109	92.7	113	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	6.94e-005 J	<8.1e-005
Barium	mg/L	0.083	0.0756	0.0764	0.0799	0.0791	0.0898	0.0789	0.0685	--	0.0946	0.0653	0.0845	0.0602	0.0716	0.0527
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	9.7e-005 J	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000406 J	0.000248 J	0.000245 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00102	0.000182 J	0.0004
Combined Radium 226 + 228	pCi/L	0.895 U	0.322 U	0.0097 U	0.587	0.364 U	0.703	0.325 U	0.0774 U	--	-0.0134 U	0.526 U	0.691 U	0.45 U	1.27	0.599 U
Fluoride	mg/L	0.09 J	0.07 J	--	0.09 J	0.1	0.1	0.06 J	<0.05	0.0824 J	0.068 J	0.0775 J	<0.06	<0.06	0.0933 J	0.0627 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	0.00034 J	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	9.55e-005 J	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-8														
		12/07/2017	02/08/2018	04/25/2018	06/26/2018	08/08/2018	10/23/2018	12/04/2018	02/06/2019	02/27/2019	08/21/2019	04/14/2020	08/26/2020	03/23/2021	10/12/2021	5/11/2022
Appendix III																
Boron	mg/L	0.0828 J	0.0691 J	0.0571 J	0.0634 J	0.0659 J	0.0666 J	0.0617 J	0.0586 J	0.0428 J	0.0569 J	0.0474 J	0.0501 J	0.0476 J	0.0462 J	0.037 J
Calcium	mg/L	66.1	58	56.3	57.7	51.2	50.9	51.9	55	53.4	71.5	56.2	55.5	48.9	66.3	61.9
Chloride	mg/L	5.2	4.1	--	5	4.8	4.4	4.2	5.84	6.52	5.89	5.21	5.16	5.3	5.6	5.13
Fluoride	mg/L	0.14	0.11	--	0.1	0.1	0.11	0.08 J	<0.05	0.108	0.0648 J	0.0845 J	0.0732 J	0.0802 J	0.123	0.0695 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.16	6.49	6.29	6.47	6.61	6.25
Sulfate	mg/L	6.5	8.9	--	7.5	7.3	7.8	8.2	9.53	8.25	10.8	12.5	16.1	9.21	16	11.8
TDS	mg/L	253	229	223	232	208	209	213	212	211	226	222	215	200	245	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00313 J	0.00247 J	0.00291 J	0.00265 J	0.00203 J	0.00246 J	0.00328 J	0.00325 J	--	0.00302 J	0.00295 J	0.00304 J	0.00282	0.00287	0.00323
Barium	mg/L	0.244	0.135	0.224	0.181	0.134	0.17	0.189	0.226	--	0.194	0.262	0.235	0.249	0.203	0.32
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	8.32e-005 J	<6.8e-005	7.28e-005 J
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.0003 J	<0.000203	0.000217 J
Cobalt	mg/L	0.00212 J	<0.002	0.00204 J	<0.002	<0.002	<0.002	<0.002	0.00232 J	--	0.00303 J	0.00385 J	0.00388 J	0.003	0.00298	0.00461
Combined Radium 226 + 228	pCi/L	7.45 U	0.549	0.65	0.436 U	0.486 U	0.319 U	0.875	0.378 U	--	0.552 U	0.641 U	0.339 U	0.662 U	0.291 U	0.475 U
Fluoride	mg/L	0.14	0.11	--	0.1	0.1	0.11	0.08 J	<0.05	0.108	0.0648 J	0.0845 J	0.0732 J	0.0802 J	0.123	0.0695 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	0.000284 J	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000357	0.000319	0.000403
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-9														
		12/07/2017	02/08/2018	04/25/2018	06/26/2018	08/08/2018	10/23/2018	12/05/2018	02/06/2019	02/27/2019	08/21/2019	04/14/2020	08/26/2020	03/23/2021	10/12/2021	5/11/2022
Appendix III																
Boron	mg/L	0.0614 J	0.0531 J	0.0551 J	0.0568 J	0.0524 J	0.0576 J	0.0561 J	0.0627 J	0.0474 J	0.0524 J	0.0562 J	0.0565 J	0.0609 J	0.0632 J	0.0636 J
Calcium	mg/L	38.7	38.8	40.3	39.9	42.3	39.8	43.8	34.9	42.5	50.9	43.6	43.2	38.1	35.4	36.9
Chloride	mg/L	7	--	--	6.4	5.5	6.7	5.9	7.26	6.77	6.16	7.27	6.57	7.42	7.78	7.2
Fluoride	mg/L	0.12	--	--	0.13	0.12	0.13	0.04 J	<0.05	0.147	0.0984 J	0.133	0.13	0.132	0.147	0.108 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.61	7.02	6.75	6.85	6.9	6.7
Sulfate	mg/L	9	--	--	8.5	6.7	9.4	7.8	17	12.4	11.3	15.9	12.9	15.7	18	17.7
TDS	mg/L	183	--	180	191	192	185	200	151	186	200	187	192	178	169	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00112 J	<0.001	<0.001	<0.001	<0.001	<0.001	0.00111 J	<0.001	--	<0.001	0.00118 J	<0.001	0.00063	0.000635	0.000555
Barium	mg/L	0.187	0.148	0.158	0.16	0.161	0.183	0.186	0.128	--	0.183	0.186	0.202	0.157	0.147	0.16
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000422 J	0.00031 J	0.00021 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00103	0.00113	0.000908
Combined Radium 226 + 228	pCi/L	0.226 U	0.071 U	0.569	0.43 U	0.656	0.395 U	0.52 U	0.244 U	--	1.53 U	0.119 U	1.18	0.694 U	0.311 U	0.605 U
Fluoride	mg/L	0.12	--	--	0.13	0.12	0.13	0.04 J	<0.05	0.147	0.0984 J	0.133	0.13	0.132	0.147	0.108 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.00027	0.000177 J	0.000236
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-PZ-1														
		06/27/2018	07/18/2018	08/07/2018	09/05/2018	09/24/2018	10/22/2018	12/03/2018	02/05/2019	02/25/2019	08/20/2019	04/13/2020	08/24/2020	03/24/2021	10/05/2021	5/9/2022
Appendix III																
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	39.4	38.4	36.7	43.6	44.5	45	33.7	30.1	25.3	38.3	25.9	29	22.2	25.4	18.9
Chloride	mg/L	3.6	3.8	3.3	3.4	3.8	3.3	3.2	3.78	3.75	3.52	3.36	3.35	3.45	3.23	3.46
Fluoride	mg/L	0.13	0.11	0.11	0.13	0.13	0.13	0.08 J	0.0934 J	<0.05	0.0889 J	0.103	0.114	0.0725 J	<0.06	0.0824 J
pH_Field	pH	--	--	--	--	--	--	--	--	--	6.3	6.66	6.64	5.85	6.46	6.03
Sulfate	mg/L	2.2 J	2.5 J	<1.4	1.4 J	<1.4	1.7 J	2.1 J	3.99	3.86	3.73	3.83	4.16	2.88	2.17	2.51
TDS	mg/L	144	156	140	154	165	148	127	113	107	141	104	114	94	108	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.115	0.116	0.0906	0.116	0.125	0.102	0.0784	0.0578	--	0.097	0.0529	0.0733	0.0525	0.0811	0.057
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000442 J	0.000352 J	0.000274 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	0.000436	0.000139 J
Combined Radium 226 + 228	pCi/L	0.188 U	0.314 U	0.279 U	0.589	0.772	0.621	0.188 U	0.274 U	--	0.663	-0.129 U	0.177 U	0.245 U	2.07	0.784 U
Fluoride	mg/L	0.13	0.11	0.11	0.13	0.13	0.13	0.08 J	0.0934 J	<0.05	0.0889 J	0.103	0.114	0.0725 J	<0.06	0.0824 J
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	9.88e-005 J	7.3e-005 J	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-PZ-2				
		04/13/2020	08/24/2020	03/17/2021	10/05/2021	5/9/2022
Appendix III						
Boron	mg/L	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	16.1	24.8	5.21	17.6	7.02
Chloride	mg/L	5.42	5.46	5.53	5.79	5.51
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	5.84	6	5.34	5.72	4.35
Sulfate	mg/L	1.48	3.88	1.64	5.29	1.15 J
TDS	mg/L	88	115	53.3	101	--
Appendix IV						
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	8.26e-005 J	9.28e-005 J	0.000101 J
Barium	mg/L	0.0832	0.132	0.045	0.118	0.0593
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	0.000764 J	0.000346 J	0.000617 J
Cobalt	mg/L	0.00489 J	0.00237 J	0.00616	0.00287	0.00691
Combined Radium 226 + 228	pCi/L	0.472 U	-0.00312 U	0.756 U	1.13	0.352 U
Fluoride	mg/L	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	0.000191 J	0.000121 J	0.000178 J
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<6.8e-005	0.00028	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-PZ-5														
		06/27/2018	07/18/2018	08/08/2018	09/05/2018	09/24/2018	10/23/2018	12/03/2018	02/07/2019	02/25/2019	08/21/2019	04/15/2020	08/24/2020	03/16/2021	10/12/2021	5/10/2022
Appendix III																
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	4.56	3.92	3.74	3.38	3.25	3.37	3.67	2.89	2.95	3.04	2.93	2.94	2.9	2.94	2.87
Chloride	mg/L	4.2	4.1	3.3	3.7	3.9	4	3.6	3.72	3.95	3.85	3.83	3.96	3.98	4.07	4.12
Fluoride	mg/L	0.05 J	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	5.13	5.31	4.65	5.47	5.33	5.38
Sulfate	mg/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	0.639 J	<0.5	1.21	0.554 J	<0.5	1.02	0.895 J	1.02 J
TDS	mg/L	48.7	46	48	47.3	44.7	35.3	48.7	42.7	40.7	46	41.3	42.7	42	38.7	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.00114 J	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	8.08e-005 J	<6.8e-005	<8.1e-005
Barium	mg/L	0.154	0.15	0.119	0.123	0.112	0.125	0.126	0.0602	--	0.085	0.0535	0.0565	0.0553	0.0494	0.0497
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	0.000304 J	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	8.42e-005 J	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000534 J	0.000337 J	0.000368 J
Cobalt	mg/L	0.00341 J	0.00341 J	0.00221 J	0.00202 J	<0.002	<0.002	0.00227 J	<0.002	--	0.00225 J	<0.002	<0.002	0.000384	8.08e-005 J	0.00015 J
Combined Radium 226 + 228	pCi/L	0.259 U	0.434	0.763	0.631	0.588	0.383 U	0.736	0.0202 U	--	0.442 U	0.432 U	0.454 U	0.32 U	0.963 U	0.659 U
Fluoride	mg/L	0.05 J	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00013 J	<6.8e-005	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-PZ-6														
		06/27/2018	07/18/2018	08/08/2018	09/05/2018	09/24/2018	10/23/2018	12/03/2018	02/07/2019	02/25/2019	08/21/2019	04/15/2020	08/24/2020	03/16/2021	10/12/2021	5/10/2022
Appendix III																
Boron	mg/L	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	3.89	3.8	3.89	3.78	3.73	3.79	3.79	3.75	3.81	3.71	3.56	3.45	3.44	3.29	3.24
Chloride	mg/L	4.1	4.3	3.8	3.9	4.2	4.1	3.8	4.15	4.2	4	3.71	3.59	3.66	3.68	3.68
Fluoride	mg/L	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
pH_Field	pH	--	--	--	--	--	--	--	--	--	5.44	5.52	5.38	5.56	5.41	5.57
Sulfate	mg/L	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	1.69	1.53	1.62	1.68	1.31	1.7	1.34	1.28 J
TDS	mg/L	44	42.7	46	67.3	49.3	31.3	46	32.7	31.3	42.7	37.3	37.3	41.3	35.3	--
Appendix IV																
Antimony	mg/L	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	0.00181 J	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<8.1e-005
Barium	mg/L	0.0298	0.0312	0.0265	0.0291	0.029	0.0298	0.0307	0.028	--	0.0312	0.0296	0.031	0.0293	0.0303	0.0309
Beryllium	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000534 J	0.000307 J	0.00037 J
Cobalt	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	0.000108 J	0.000142 J	0.000121 J
Combined Radium 226 + 228	pCi/L	0.231 U	0.676	0.496	0.62	-0.12 U	0.352 U	0.238 U	0.395 U	--	-0.00256 U	0.000738 U	0.404 U	0.589 U	1.57	0.468 U
Fluoride	mg/L	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	0.04 J	<0.032	<0.05	<0.05	<0.05	<0.06	<0.06	<0.06	<0.06	<0.06
Lead	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	8.35e-005 J	0.000119 J	0.000118 J
Lithium	mg/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	--	<0.01	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.00286
Molybdenum	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-2VA						GSD-AP-MW-2VB			GSD-AP-MW-4V				
		04/15/2020	07/01/2020	08/25/2020	03/22/2021	10/06/2021	5/16/2022	03/30/2021	10/12/2021	5/16/2022	04/15/2020	08/26/2020	03/24/2021	10/11/2021	5/11/2022
Appendix III															
Boron	mg/L	0.587	--	0.552	0.537	0.54	0.556	0.605	0.617	0.622	0.0634 J	0.0611 J	0.0618 J	0.0596 J	0.062 J
Calcium	mg/L	5	--	4.97	5.71	5.38	5.22	3.71	3.96	3.81	23.9	23.5	22.9	23	22.6
Chloride	mg/L	6.47	--	6.4	6.65	6.82	6.86	32	38	38.8	5.16	5.37	5.55	5.65	5.48
Fluoride	mg/L	2.51	--	2.4	2.33	2.56	2.4	6.09	5.97	6.14	0.218	0.217	0.212	0.23	0.175
pH_Field	pH	8.6	8.36	8.43	8.34	8.36	8.1	8.52	8.62	8.48	7.93	7.83	8.01	7.82	7.91
Sulfate	mg/L	4.18	--	4.83	2.04	2.44	1.15 J	10.3	15.2	7.94	1.25	1.21	1.39	1.7	1.73 J
TDS	mg/L	324	--	321	314	317	--	528	536	--	218	239	222	220	--
Appendix IV															
Antimony	mg/L	<0.0008	--	<0.0008	<0.000507	<0.000508	<0.000508	<0.000507	<0.000508	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	<0.001	--	0.00135 J	0.00145	0.00139	0.00135	0.000278	0.000426	0.000393	<0.001	<0.001	0.00034	0.000366	0.000309
Barium	mg/L	0.2	--	0.135	0.114	0.12	0.132	0.313	0.242	0.322	0.457	0.534	0.477	0.483	0.525
Beryllium	mg/L	<0.0006	--	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	--	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	--	<0.002	0.000433 J	0.00025 J	0.000288 J	0.00112	0.000353 J	0.000264 J	<0.002	<0.002	0.000402 J	0.000314 J	0.000239 J
Cobalt	mg/L	<0.002	--	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	0.000116 J	<6.8e-005	<6.8e-005	<0.002	<0.002	8.16e-005 J	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.231 U	--	0.807	0.58 U	0.746 U	0.285 U	0.185 U	0.323 U	0.253 U	0.329 U	0.839	0.725 U	1.58	0.576 U
Fluoride	mg/L	2.51	--	2.4	2.33	2.56	2.4	6.09	5.97	6.14	0.218	0.217	0.212	0.23	0.175
Lead	mg/L	<0.001	--	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0783	0.069	0.0666	0.0666	0.0685	0.0612	0.13	0.129	0.111	0.0219	0.0203	0.0203	0.0198 J	0.0187 J
Mercury	mg/L	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	--	0.00323 J	0.00386	0.00363	0.00357	0.000673	0.00156	0.000955	<0.002	<0.002	0.00188	0.00173	0.00135
Selenium	mg/L	<0.002	--	<0.002	<0.000507	<0.000508	<0.000508	<0.000507	<0.000508	<0.000508	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	--	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

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Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-21VC		GSD-AP-MW-22VB		GSD-AP-MW-18H					GSD-AP-MW-19H					
		10/06/2021	5/17/2022	10/11/2021	5/17/2022	04/15/2020	08/25/2020	03/16/2021	10/12/2021	5/10/2022	04/14/2020	06/01/2020	08/26/2020	03/23/2021	10/11/2021	5/16/2022
Appendix III																
Boron	mg/L	0.532	0.548	0.378	0.385	0.124	0.105	0.0545 J	0.0717 J	0.0883 J	0.448	--	0.39	0.41	0.328	0.336
Calcium	mg/L	3.46	3.3	9.35	9.99	19.1	14.9	5.77	10.3	12.4	32.9	--	39.3	31.7	40	26.9
Chloride	mg/L	166	188	1.72	1.69	6	5.79	3.85	4.59	6.38	7.35	--	7.03	7.11	7.04	7.23
Fluoride	mg/L	8.34	8.22	1.43	1.27	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	--	<0.06	<0.06	0.0779 J	<0.06
pH_Field	pH	8.53	8.31	8.13	8.29	5.1	5.13	5.08	5.12	4.87	5.79	--	6.33	5.88	6.08	5.24
Sulfate	mg/L	8.35	19.1	13.8	6.55	67.1	52.6	18.5	36.7	42.1	75.3	--	72.9	71.8	61.7	60.2
TDS	mg/L	864	--	230	--	126	107	52	78.7	--	190	--	202	174	202	--
Appendix IV																
Antimony	mg/L	0.00051 J	0.000508 J	0.00167	<0.000508	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.0008	--	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00162	0.0014	0.00408	0.00303	<0.001	<0.001	0.000136 J	0.00019 J	0.000154 J	<0.001	--	<0.001	0.000512	0.000846	0.000183 J
Barium	mg/L	0.374	0.435	0.238	0.276	0.0389	0.0388	0.0243	0.0298	0.0361	0.153	--	0.201	0.148	0.17	0.124
Beryllium	mg/L	<0.000406	<0.000406	<0.000406	<0.000406	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.0006	--	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005	<0.0003	--	<0.0003	<6.8e-005	0.000124 J	0.000151 J
Chromium	mg/L	0.00111	0.00104	0.000412 J	0.00032 J	<0.002	<0.002	0.000363 J	0.000209 J	0.00025 J	<0.002	--	<0.002	0.000404 J	0.000475 J	0.000277 J
Cobalt	mg/L	0.000205	0.000193 J	<6.8e-005	8.2e-005 J	<0.002	<0.002	0.000577	0.000615	0.000302	0.00886	--	0.0101	0.00674	0.00579	0.00485
Combined Radium 226 + 228	pCi/L	1.78	0.4 U	1.29	0.306 U	0.419 U	1.45	0.405 U	0.383 U	0.576 U	42.6	0.215 U	0.265 U	0.562 U	0.202 U	0.471 U
Fluoride	mg/L	8.34	8.22	1.43	1.27	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	--	<0.06	<0.06	0.0779 J	<0.06
Lead	mg/L	0.000225	0.000216	<6.8e-005	<6.8e-005	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<0.001	--	<0.001	0.000201 J	0.000155 J	0.000151 J
Lithium	mg/L	0.227	0.196	0.0544	0.0499	<0.01	<0.01	<0.007105	<0.007105	<0.007105	<0.01	--	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	0.00107	0.00194	0.00538	0.0028	<0.002	<0.002	<6.8e-005	<6.8e-005	<0.000102	<0.002	--	<0.002	<6.8e-005	0.000118 J	<0.000102
Selenium	mg/L	<0.000508	<0.000508	<0.000508	<0.000508	<0.002	<0.002	0.000935 J	0.000679 J	0.00125	<0.002	--	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005	<0.0002	--	<0.0002	<6.8e-005	<6.8e-005	<6.8e-005

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Southern Company

Appendix A. Groundwater Analytical Data
Plant Gadsden Ash Storage Pond

Analyte	Units	GSD-AP-MW-20H				
		04/14/2020	08/26/2020	03/23/2021	10/11/2021	5/17/2022
Appendix III						
Boron	mg/L	0.308	0.308	0.419	0.504	0.632
Calcium	mg/L	51.5	47.6	57.6	63.4	74.7
Chloride	mg/L	6.64	6.73	6.33	6.37	6.22
Fluoride	mg/L	0.125	0.103	0.108	0.127	<0.06
pH_Field	pH	6.02	6.36	6.38	6.36	5.74
Sulfate	mg/L	135	112	168	174	187
TDS	mg/L	323	310	385	384	--
Appendix IV						
Antimony	mg/L	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508
Arsenic	mg/L	0.00287 J	0.00186 J	0.00226	0.00191	0.002
Barium	mg/L	0.189	0.197	0.217	0.134	0.115
Beryllium	mg/L	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<6.8e-005
Chromium	mg/L	<0.002	<0.002	0.000417 J	0.000246 J	0.000215 J
Cobalt	mg/L	0.0122	0.0104	0.0125	0.00995	0.0102
Combined Radium 226 + 228	pCi/L	0.0962 U	0.413 U	0.847 U	1.09 U	0.551 U
Fluoride	mg/L	0.125	0.103	0.108	0.127	<0.06
Lead	mg/L	<0.001	<0.001	<6.8e-005	8.19e-005 J	<6.8e-005
Lithium	mg/L	<0.01	<0.01	<0.007105	<0.007105	<0.007105
Mercury	mg/L	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Molybdenum	mg/L	<0.002	<0.002	0.000481	0.000312	0.000405
Selenium	mg/L	<0.002	<0.002	<0.000507	<0.000508	<0.000508
Thallium	mg/L	<0.0002	<0.0002	0.000145 J	0.00013 J	0.000132 J

Notes:

1. mg/L - Milligrams per Liter
2. pCi/L - picocuries per Liter
3. J - Result is an estimated value. The result is greater than or equal to the Method Detection Limit (MDL) and less than the Practical Quantita

Appendix B

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)											
		12/4/2017	2/6/2018	2/9/2018	3/19/2018	3/28/2018	4/9/2018	4/23/2018	5/9/2018	5/16/2018	5/21/2018	5/23/2018	5/25/2018
GSD-AP-MW-1	526.37	513.72	514.90	515.77	517.56	517.24	516.72	517.40	516.17	515.59	515.20	515.13	515.05
GSD-AP-MW-2	526.16	513.78	514.70	515.20	516.58	516.30	515.95	516.38	515.53	515.11	514.82	514.82	514.73
GSD-AP-MW-3	526.80	513.81	514.75	515.11	515.92	515.73	515.41	516.19	514.95	514.64	514.43	514.61	514.46
GSD-AP-MW-4	520.60	513.76	514.69	515.01	515.76	515.59	515.27	516.05	514.83	514.51	514.32	514.55	514.38
GSD-AP-MW-5	516.27	510.81	511.80	512.14	512.25	512.09	511.85	512.49	511.46	511.22	511.12	511.32	511.24
GSD-AP-MW-6	515.23	509.89	510.60	510.88	510.72	510.59	510.36	511.08	510.16	510.02	509.97	510.15	510.06
GSD-AP-MW-7	519.86	507.66	508.62	509.44	509.33	509.14	508.62	509.52	508.85	508.67	508.49	508.61	508.55
GSD-AP-MW-8	519.22	506.85	506.90	508.22	506.94	507.09	506.60	508.02	507.99	507.84	507.96	508.03	507.85
GSD-AP-MW-9	520.36	505.87	506.86	508.09	506.98	507.04	506.60	507.85	507.99	507.88	508.01	508.01	507.88
GSD-AP-MW-10	530.91	509.82	509.68	510.06	509.78	509.25	509.14	509.75	509.61	509.55	509.56	509.64	509.52
GSD-AP-MW-11	517.01	507.46	507.93	508.88	507.96	507.98	507.59	508.66	508.43	508.24	508.27	508.35	508.21
GSD-AP-MW-12	521.82	511.62	513.11	513.83	513.99	513.71	513.20	514.13	512.81	512.33	511.87	512.12	511.94
GSD-AP-MW-14	548.34	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-16	555.83	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-17	550.11	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-PZ-1	521.64	512.46	514.59	516.13	517.26	517.01	516.42	517.21	515.69	514.88	514.30	514.40	514.26
GSD-AP-PZ-2	516.49	506.92	507.81	508.83	507.87	507.96	507.47	508.58	508.37	508.15	508.25	508.35	508.19
GSD-AP-PZ-5	524.26	--	--	--	--	--	516.71	--	515.97	515.11	514.46	514.59	514.43
GSD-AP-PZ-6	519.60	--	--	--	--	--	516.57	--	515.86	515.03	514.45	514.58	514.42
GSD-AP-MW-4V	520.33	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-18H	524.45	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-19H	517.32	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-20H	516.68	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2V	525.31	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VA	524.94	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VB	522.56	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VC	522.81	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VB	520.24	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VC	521.13	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-22VB	518.01	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-23VB	519.03	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

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

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)											
		5/31/2018	6/4/2018	6/7/2018	6/11/2018	6/14/2018	6/18/2018	6/21/2018	6/25/2018	6/28/2018	7/2/2018	7/5/2018	7/9/2018
GSD-AP-MW-1	526.37	514.81	514.65	514.49	514.27	514.14	513.94	513.83	513.69	513.61	513.51	513.44	513.30
GSD-AP-MW-2	526.16	514.60	514.46	514.32	514.12	514.00	513.83	513.73	513.63	513.55	513.49	513.40	513.30
GSD-AP-MW-3	526.80	514.50	514.26	514.11	513.91	513.86	513.67	513.61	513.55	513.51	513.48	513.37	513.26
GSD-AP-MW-4	520.60	514.45	514.18	514.02	513.85	513.71	513.60	513.56	513.46	513.45	513.41	513.29	513.17
GSD-AP-MW-5	516.27	511.24	511.09	510.88	510.66	510.41	510.52	510.60	510.60	510.83	510.81	510.49	510.18
GSD-AP-MW-6	515.23	510.10	509.98	509.85	509.61	509.46	509.72	509.73	509.72	509.90	509.89	509.67	509.32
GSD-AP-MW-7	519.86	508.34	508.39	508.33	508.18	508.05	507.92	508.01	507.90	507.87	507.97	507.82	507.71
GSD-AP-MW-8	519.22	507.70	508.20	507.87	507.69	507.68	507.86	507.84	507.88	507.55	507.79	507.81	507.43
GSD-AP-MW-9	520.36	507.74	508.20	507.91	507.70	507.72	507.90	507.88	507.90	507.60	507.83	507.83	507.48
GSD-AP-MW-10	530.91	509.56	509.52	509.44	509.31	509.26	509.43	509.51	509.56	509.41	509.51	509.41	509.26
GSD-AP-MW-11	517.01	508.07	508.39	508.19	507.98	507.95	508.03	508.09	508.09	507.86	508.03	507.99	507.73
GSD-AP-MW-12	521.82	512.73	511.60	511.43	511.20	511.06	510.92	510.89	510.80	510.75	510.75	510.61	510.47
GSD-AP-MW-14	548.34	--	--	--	--	--	--	--	526.46	--	--	--	--
GSD-AP-MW-16	555.83	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-17	550.11	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-PZ-1	521.64	514.01	513.76	513.50	513.23	513.00	512.73	512.65	512.43	512.40	512.24	512.08	511.89
GSD-AP-PZ-2	516.49	508.04	508.29	508.08	507.92	507.81	507.88	508.00	507.98	507.79	508.00	507.91	507.61
GSD-AP-PZ-5	524.26	514.16	513.87	513.61	513.38	513.18	512.91	512.85	512.60	512.52	512.39	512.24	512.06
GSD-AP-PZ-6	519.60	514.18	513.88	513.61	513.35	513.16	512.90	512.80	512.57	512.51	512.39	512.28	512.02
GSD-AP-MW-4V	520.33	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-18H	524.45	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-19H	517.32	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-20H	516.68	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2V	525.31	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VA	524.94	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VB	522.56	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VC	522.81	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VB	520.24	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VC	521.13	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-22VB	518.01	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-23VB	519.03	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

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

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)											
		7/12/2018	7/18/2018	7/19/2018	7/23/2018	7/26/2018	8/2/2018	8/6/2018	8/20/2018	8/23/2018	8/27/2018	8/30/2018	9/6/2018
GSD-AP-MW-1	526.37	513.21	--	513.03	512.90	512.81	512.90	512.90	512.69	512.63	512.54	512.48	512.27
GSD-AP-MW-2	526.16	513.21	--	513.05	512.93	512.85	513.01	513.03	512.78	512.71	512.61	512.54	512.36
GSD-AP-MW-3	526.80	513.17	--	513.05	512.92	512.83	513.38	513.09	512.88	512.82	512.67	512.60	512.42
GSD-AP-MW-4	520.60	513.09	--	512.98	512.85	512.77	513.42	513.08	512.86	512.79	514.66	512.57	512.38
GSD-AP-MW-5	516.27	509.95	--	510.06	509.68	509.48	510.79	510.60	510.62	510.32	510.00	509.79	509.37
GSD-AP-MW-6	515.23	509.13	--	509.27	508.86	508.68	510.15	509.85	509.81	509.61	509.26	509.11	508.68
GSD-AP-MW-7	519.86	507.65	--	507.58	507.42	507.33	507.82	507.96	507.92	507.85	507.68	507.54	507.24
GSD-AP-MW-8	519.22	507.69	--	507.54	507.39	507.48	508.25	507.98	507.76	507.78	507.70	507.79	507.77
GSD-AP-MW-9	520.36	507.73	--	507.59	507.45	507.54	508.25	508.06	507.76	507.82	507.70	507.84	507.79
GSD-AP-MW-10	530.91	509.24	--	509.23	509.10	509.04	509.96	509.81	509.35	509.32	509.19	509.18	509.09
GSD-AP-MW-11	517.01	507.85	--	507.74	507.62	507.64	508.55	508.26	507.93	507.95	507.89	507.92	507.88
GSD-AP-MW-12	521.82	510.35	--	510.24	510.07	509.93	511.43	510.99	510.70	510.54	510.35	510.24	510.00
GSD-AP-MW-14	548.34	--	526.24	--	--	--	--	526.24	--	--	--	--	526.00
GSD-AP-MW-16	555.83	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-17	550.11	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-PZ-1	521.64	511.73	511.47	511.49	511.26	511.10	511.48	511.38	511.18	511.11	510.87	510.74	510.46
GSD-AP-PZ-2	516.49	507.67	--	507.62	507.41	507.39	508.46	508.19	508.03	507.96	507.81	507.83	507.70
GSD-AP-PZ-5	524.26	511.92	511.72	511.67	511.46	511.31	511.54	511.42	511.24	511.11	510.98	510.88	510.62
GSD-AP-PZ-6	519.60	511.90	511.70	511.65	511.42	511.28	511.60	511.44	511.26	511.15	510.98	510.89	510.61
GSD-AP-MW-4V	520.33	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-18H	524.45	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-19H	517.32	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-20H	516.68	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2V	525.31	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VA	524.94	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VB	522.56	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VC	522.81	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VB	520.24	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VC	521.13	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-22VB	518.01	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-23VB	519.03	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

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

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)											
		9/10/2018	9/13/2018	9/20/2018	9/24/2018	9/27/2018	10/1/2018	10/4/2018	10/15/2018	10/22/2018	11/14/2018	11/28/2018	12/3/2018
GSD-AP-MW-1	526.37	512.17	512.08	511.88		511.81	512.02	511.94	511.70	511.57	--	--	513.12
GSD-AP-MW-2	526.16	512.25	512.16	511.97		512.05	512.23	512.12	511.84	511.73	--	--	513.15
GSD-AP-MW-3	526.80	512.30	512.23	512.05		512.53	512.55	512.39	512.03	511.90	--	--	513.50
GSD-AP-MW-4	520.60	512.28	512.19	512.01		512.63	512.58	512.40	512.03	511.89	--	--	513.54
GSD-AP-MW-5	516.27	509.25	509.21	508.88		510.63	510.63	510.40	509.76	509.64	--	--	511.52
GSD-AP-MW-6	515.23	508.56	508.56	508.21		510.16	509.95	509.78	509.17	509.05	--	--	510.58
GSD-AP-MW-7	519.86	507.15	507.11	506.97		507.68	507.98	507.94	507.76	507.54	--	--	509.41
GSD-AP-MW-8	519.22	507.61	507.74	507.75		508.30	507.81	507.90	507.62	507.37	--	--	508.98
GSD-AP-MW-9	520.36	507.66	507.79	507.82		508.28	507.86	507.93	507.63	507.39	--	--	508.69
GSD-AP-MW-10	530.91	509.05	509.10	509.09		509.54	509.55	509.39	509.03	508.97	--	--	509.66
GSD-AP-MW-11	517.01	507.74	507.82	507.84		508.48	508.14	508.07	507.77	507.53	--	--	509.29
GSD-AP-MW-12	521.82	509.79	509.69	509.68		510.31	510.57	510.38	509.87	509.64	--	--	512.76
GSD-AP-MW-14	548.34	--	--	--	525.80	--	--	--	--	525.80	--	--	526.19
GSD-AP-MW-16	555.83	--	--	--	--	--	--	--	--	529.67	529.34	529.51	529.75
GSD-AP-MW-17	550.11	--	--	--	--	--	--	--	--	531.30	530.47	530.50	530.77
GSD-AP-PZ-1	521.64	510.29	510.18	509.86	509.63	510.16	510.48	512.40	510.01	509.86	--	--	512.99
GSD-AP-PZ-2	516.49	507.56	507.62	507.50	--	508.50	508.22	508.16	507.79	507.51	--	--	509.29
GSD-AP-PZ-5	524.26	510.44	510.36	510.07	509.95	510.12		510.25	510.02	509.93	--	--	512.73
GSD-AP-PZ-6	519.60	510.45	510.34	509.93	509.91	510.19		510.33	510.06	509.95	--	--	513.05
GSD-AP-MW-4V	520.33	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-18H	524.45	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-19H	517.32	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-20H	516.68	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2V	525.31	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VA	524.94	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VB	522.56	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-2VC	522.81	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VB	520.24	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-21VC	521.13	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-22VB	518.01	--	--	--	--	--	--	--	--	--	--	--	--
GSD-AP-MW-23VB	519.03	--	--	--	--	--	--	--	--	--	--	--	--

Notes:

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

Appendix B.
Historical Groundwater Elevations Summary

Well Name	Top of Casing Elevation	Groundwater Elevation (ft AMSL)									
		12/18/2018	1/3/2019	2/4/2019	2/25/2019	6/10/2019	8/19/2019	4/13/2020	8/24/2020	3/15/2021	5/5/2022
GSD-AP-MW-1	526.37	--	--	517.76	519.26	514.50	511.97	517.91	512.36	516.98	516.18
GSD-AP-MW-2	526.16	--	--	516.64	518.15	514.30	512.01	516.67	512.37	516.10	515.54
GSD-AP-MW-3	526.80	--	--	515.98	517.38	514.21	512.03	516.42	512.48	515.58	515.04
GSD-AP-MW-4	520.60	--	--	515.78	517.13	514.13	512.00	515.99	512.57	515.41	514.94
GSD-AP-MW-5	516.27	--	--	512.09	513.01	511.13	508.72	512.38	510.36	511.63	514.81
GSD-AP-MW-6	515.23	--	--	510.70	511.64	510.02	507.89	511.28	509.81	510.32	511.48
GSD-AP-MW-7	519.86	--	--	509.82	513.85	508.34	506.95	510.09	507.64	508.87	510.16
GSD-AP-MW-8	519.22	--	--	508.46	511.45	507.78	507.62	509.16	507.98	507.18	508.75
GSD-AP-MW-9	520.36	--	--	508.46	511.42	507.83	507.61	508.71	508.06	507.19	507.97
GSD-AP-MW-10	530.91	--	--	509.93	511.87	509.34	508.74	509.73	509.13	508.82	507.98
GSD-AP-MW-11	517.01	--	--	509.06	511.67	508.12	507.59	509.18	507.99	507.92	509.05
GSD-AP-MW-12	521.82	--	--	514.11	515.43	511.29	508.94	514.20	509.66	513.06	508.32
GSD-AP-MW-14	548.34	--	--	527.65	528.71	527.07	526.25	528.26	526.07	527.24	512.20
GSD-AP-MW-16	555.83	529.98	530.52	531.32	531.98	530.55	529.71	531.91	529.60	530.64	527.40
GSD-AP-MW-17	550.11	531.44	532.49	532.25	534.03	531.23	530.30	532.80	530.65	531.68	530.93
GSD-AP-PZ-1	521.64	--	--	517.29	519.05	513.54	510.14	517.30	510.78	516.46	515.45
GSD-AP-PZ-2	516.49	--	--	509.02	511.33	508.15	507.31	509.12	508.13	507.85	508.25
GSD-AP-PZ-5	524.26	--	--	517.72	519.28	513.81	510.37	518.21	511.00	516.90	515.92
GSD-AP-PZ-6	519.60	--	--	517.43	518.72	513.82	510.30	517.75	510.99	516.73	515.77
GSD-AP-MW-4V	520.33	--	--	--	--	--	--	516.09	512.39	515.31	515.77
GSD-AP-MW-18H	524.45	--	--	--	--	--	--	518.59	511.07	517.02	516.01
GSD-AP-MW-19H	517.32	--	--	--	--	--	--	516.97	511.36	516.29	515.58
GSD-AP-MW-20H	516.68	--	--	--	--	--	--	516.28	512.47	515.39	514.90
GSD-AP-MW-2V	525.31	--	--	--	--	--	--	516.60	512.43	516.13	515.54
GSD-AP-MW-2VA	524.94	--	--	--	--	--	--	519.33	512.43	516.13	515.56
GSD-AP-MW-2VB	522.56	--	--	--	--	--	--	--	--	516.15	515.59
GSD-AP-MW-2VC	522.81	--	--	--	--	--	--	--	--	483.10	515.84
GSD-AP-MW-21VB	520.24	--	--	--	--	--	--	--	--	467.53	515.61
GSD-AP-MW-21VC	521.13	--	--	--	--	--	--	--	--	513.09	515.83
GSD-AP-MW-22VB	518.01	--	--	--	--	--	--	--	--	513.30	515.68
GSD-AP-MW-23VB	519.03	--	--	--	--	--	--	--	--	510.42	515.92

Notes:

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

Appendix C

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Plant Gadsden Ash Pond

2022 Compliance Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Possible iron bacteria was observed during initial pumping of well MW-20H.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
    - EB-1 and EB-2 had a result greater than the RL for Total Manganese.

- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	05/05/2022	Weather	Sunny 80
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1130	10.19	✔	✔	✔	✔	✔	
PZ-1	1057	6.19	✔	✔	✔	✔	✔	
MW-2	1145	10.62	✔	✔	✔	✔	✔	
MW-2V	1147	9.77	✔	✔	✔	✔	✔	
MW-2VA	1150	9.38	✔	✔	✔	✔	✔	
MW-2VB	1154	6.97	✔	✔	✔	✔	✔	
MW-2VC	1152	7.03	✔	✔	✔	✔	✔	
PZ-2	1104	8.24	✔	✔	✔	✔	✔	
MW-3	1048	11.76	✔	✔	✔	✔	✔	
MW-4	1052	5.66	✔	✔	✔	✔	✔	
MW-4V	1050	5.52	✔	✔	✔	✔	✔	
MW-5	1100	4.79	✔	✔	✔	✔	✔	
PZ-5	1136	8.34	✔	✔	✔	✔	✔	
MW-6	1106	5.07	✔	✔	✔	✔	✔	
PZ-6	1143	3.83	✔	✔	✔	✔	✔	
MW-7	1109	11.11	✔	✔	✔	✔	✔	
MW-8	1115	11.25	✔	✔	✔	✔	✔	
MW-9	1117	12.38	✔	✔	✔	✔	✔	
MW-10	1120	21.86	✔	✔	✔	✔	✔	
MW-11	1125	8.69	✔	✔	✔	✔	✔	
MW-12	1128	9.62	✔	✔	✔	✔	✔	
MW-13	NA	NA	✔	✔	✔	✔	✔	
MW-14	1020	20.94	✔	✔	✔	✔	✔	
MW-15	NA	NA	✔	✔	✔	✔	✔	
MW-16	1024	24.90	✔	✔	✔	✔	✔	
MW-17	1026	18.41	✔	✔	✔	✔	✔	
MW-18H	1133	8.44	✔	✔	✔	✔	✔	
MW-19H	1204	1.74	✔	✔	✔	✔	✔	
MW-20H	1054	1.78	✔	✔	✔	✔	✔	
MW-21VB	1157	4.63	✔	✔	✔	✔	✔	
MW-21VC	1156	5.30	✔	✔	✔	✔	✔	
MW-22VB	1200	2.33	✔	✔	✔	✔	✔	
MW-23VB	1140	3.11	✔	✔	✔	✔	✔	

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	05/05/2022	Weather	Sunny 80
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1130	10.19						
PZ-1	1057	6.19						
MW-2	1145	10.62						
MW-2V	1147	9.77						
MW-2VA	1150	9.38						
MW-2VB	1154	6.97						
MW-2VC	1152	7.03						
PZ-2	1104	8.24						
MW-3	1048	11.76						
MW-4	1052	5.66						
MW-4V	1050	5.52						
MW-5	1100	4.79						
PZ-5	1136	8.34						
MW-6	1106	5.07						
PZ-6	1143	3.83						
MW-7	1109	11.11						
MW-8	1115	11.25						
MW-9	1117	12.38						
MW-10	1120	21.86						
MW-11	1125	8.69						
MW-12	1128	9.62						
MW-13	NA	NA						
MW-14	1020	20.94						
MW-15	NA	NA						
MW-16	1024	24.90						
MW-17	1026	18.41						
MW-18H	1133	8.44						
MW-19H	1204	1.74						
MW-20H	1054	1.78						
MW-21VB	1157	4.63						
MW-21VC	1156	5.30						
MW-22VB	1200	2.33						
MW-23VB	1140	3.11						

Water Level Record/Well Inspection
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Submit

Date	05/05/2022	Weather	Sunny 80
Location	Gadsden Ash Pond		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1130	10.19						
PZ-1	1057	6.19						
MW-2	1145	10.62						
MW-2V	1147	9.77						
MW-2VA	1150	9.38						
MW-2VB	1154	6.97						
MW-2VC	1152	7.03						
PZ-2	1104	8.24						
MW-3	1048	11.76						
MW-4	1052	5.66						
MW-4V	1050	5.52						
MW-5	1100	4.79						
PZ-5	1136	8.34						
MW-6	1106	5.07						
PZ-6	1143	3.83						
MW-7	1109	11.11						
MW-8	1115	11.25						
MW-9	1117	12.38						
MW-10	1120	21.86						
MW-11	1125	8.69						
MW-12	1128	9.62						
MW-13	NA	NA						
MW-14	1020	20.94						
MW-15	NA	NA						
MW-16	1024	24.90						
MW-17	1026	18.41						
MW-18H	1133	8.44						
MW-19H	1204	1.74						
MW-20H	1054	1.78						
MW-21VB	1157	4.63						
MW-21VC	1156	5.30						
MW-22VB	1200	2.33						
MW-23VB	1140	3.11						

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 7:58	362.43	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 7:58	0.27	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 7:58	9.08	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 7:58	-9.18	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 7:58	7.62	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 7:58	17.99	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 7:58	1.14	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:03	362.51	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:03	0.24	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:03	11.16	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:03	-42.58	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:03	7.58	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:03	18	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:03	1.02	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:08	362.8	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:08	0.24	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:08	12.59	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:08	-66.25	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:08	7.59	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:08	18	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:08	1.21	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:13	363.08	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:13	0.23	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:13	13.75	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:13	-80.68	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:13	7.64	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:13	18.06	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:13	1.44	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:18	363.69	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:18	0.23	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:18	14.48	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:18	-91.4	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:18	7.69	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:18	18.13	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:18	1.59	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:23	363.38	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:23	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:23	15.23	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:23	-99.02	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:23	7.73	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:23	18.15	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:23	1.36	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:28	363.47	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:28	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:28	15.78	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:28	-104.66	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:28	7.77	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:28	18.18	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:28	1.22	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:33	363.38	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:33	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:33	16.2	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:33	-108.68	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:33	7.8	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:33	18.21	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:33	1.48	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:38	363	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:38	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:38	16.52	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:38	-112.8	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:38	7.84	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:38	18.23	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:38	1.61	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:43	362.93	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:43	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:43	16.74	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:43	-115.69	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:43	7.86	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:43	18.26	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:43	1.33	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:48	362.48	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:48	0.21	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:48	17.01	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:48	-117.99	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:48	7.87	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:48	18.28	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:48	1.14	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:53	361.99	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:53	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:53	17.21	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:53	-119.78	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:53	7.89	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:53	18.32	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:53	1.15	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 8:58	361.9	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 8:58	0.21	mg/L

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 8:58	17.36	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 8:58	-121.54	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 8:58	7.9	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 8:58	18.33	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 8:58	1.57	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 9:03	361.27	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 9:03	0.22	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 9:03	17.51	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 9:03	-122.85	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 9:03	7.91	SU
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 9:03	18.37	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 9:03	1.61	NTU
APCO-GSD-AP-MW-4V	Conductivity	5/11/2022 9:08	361.94	uS/cm
APCO-GSD-AP-MW-4V	DO	5/11/2022 9:08	0.21	mg/L
APCO-GSD-AP-MW-4V	Depth to Water Detail	5/11/2022 9:08	17.58	ft
APCO-GSD-AP-MW-4V	Oxidation Reduction Potention	5/11/2022 9:08	-124.2	mv
APCO-GSD-AP-MW-4V	pH	5/11/2022 9:08	7.91	SU
APCO-GSD-AP-MW-4V	Sulfide	5/11/2022 9:08	0	mg/L
APCO-GSD-AP-MW-4V	Temperature	5/11/2022 9:08	18.45	C
APCO-GSD-AP-MW-4V	Turbidity	5/11/2022 9:08	1.75	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-5	Conductivity	5/9/2022 14:05	327.4	uS/cm
APCO-GSD-AP-MW-5	DO	5/9/2022 14:05	0	mg/L
APCO-GSD-AP-MW-5	Depth to Water Detail	5/9/2022 14:05	5.13	ft
APCO-GSD-AP-MW-5	Oxidation Reduction Potention	5/9/2022 14:05	122.02	mv
APCO-GSD-AP-MW-5	pH	5/9/2022 14:05	5.87	SU
APCO-GSD-AP-MW-5	Temperature	5/9/2022 14:05	17.79	C
APCO-GSD-AP-MW-5	Turbidity	5/9/2022 14:05	6.71	NTU
APCO-GSD-AP-MW-5	Conductivity	5/9/2022 14:10	297.15	uS/cm
APCO-GSD-AP-MW-5	DO	5/9/2022 14:10	0.04	mg/L
APCO-GSD-AP-MW-5	Depth to Water Detail	5/9/2022 14:10	5.13	ft
APCO-GSD-AP-MW-5	Oxidation Reduction Potention	5/9/2022 14:10	135.28	mv
APCO-GSD-AP-MW-5	pH	5/9/2022 14:10	5.5	SU
APCO-GSD-AP-MW-5	Temperature	5/9/2022 14:10	17.75	C
APCO-GSD-AP-MW-5	Turbidity	5/9/2022 14:10	5.25	NTU
APCO-GSD-AP-MW-5	Conductivity	5/9/2022 14:15	289.15	uS/cm
APCO-GSD-AP-MW-5	DO	5/9/2022 14:15	0.17	mg/L
APCO-GSD-AP-MW-5	Depth to Water Detail	5/9/2022 14:15	5.13	ft
APCO-GSD-AP-MW-5	Oxidation Reduction Potention	5/9/2022 14:15	136.31	mv
APCO-GSD-AP-MW-5	pH	5/9/2022 14:15	5.4	SU
APCO-GSD-AP-MW-5	Temperature	5/9/2022 14:15	17.74	C
APCO-GSD-AP-MW-5	Turbidity	5/9/2022 14:15	4.89	NTU
APCO-GSD-AP-MW-5	Conductivity	5/9/2022 14:20	288.8	uS/cm
APCO-GSD-AP-MW-5	DO	5/9/2022 14:20	0.17	mg/L
APCO-GSD-AP-MW-5	Depth to Water Detail	5/9/2022 14:20	5.13	ft
APCO-GSD-AP-MW-5	Oxidation Reduction Potention	5/9/2022 14:20	134.29	mv
APCO-GSD-AP-MW-5	pH	5/9/2022 14:20	5.4	SU
APCO-GSD-AP-MW-5	Temperature	5/9/2022 14:20	17.7	C
APCO-GSD-AP-MW-5	Turbidity	5/9/2022 14:20	5.11	NTU
APCO-GSD-AP-MW-5	Conductivity	5/9/2022 14:25	289.78	uS/cm
APCO-GSD-AP-MW-5	DO	5/9/2022 14:25	0	mg/L
APCO-GSD-AP-MW-5	Depth to Water Detail	5/9/2022 14:25	5.13	ft
APCO-GSD-AP-MW-5	Oxidation Reduction Potention	5/9/2022 14:25	131.52	mv
APCO-GSD-AP-MW-5	pH	5/9/2022 14:25	5.43	SU
APCO-GSD-AP-MW-5	Sulfide	5/9/2022 14:25	0	mg/L
APCO-GSD-AP-MW-5	Temperature	5/9/2022 14:25	17.72	C
APCO-GSD-AP-MW-5	Turbidity	5/9/2022 14:25	4.84	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-6	Conductivity	5/10/2022 9:15	134.87	uS/cm
APCO-GSD-AP-MW-6	DO	5/10/2022 9:15	0.2	mg/L
APCO-GSD-AP-MW-6	Depth to Water Detail	5/10/2022 9:15	5.36	ft
APCO-GSD-AP-MW-6	Oxidation Reduction Potention	5/10/2022 9:15	174.94	mv
APCO-GSD-AP-MW-6	pH	5/10/2022 9:15	5.7	SU
APCO-GSD-AP-MW-6	Temperature	5/10/2022 9:15	16.87	C
APCO-GSD-AP-MW-6	Turbidity	5/10/2022 9:15	0.35	NTU
APCO-GSD-AP-MW-6	Conductivity	5/10/2022 9:20	136.56	uS/cm
APCO-GSD-AP-MW-6	DO	5/10/2022 9:20	0.16	mg/L
APCO-GSD-AP-MW-6	Depth to Water Detail	5/10/2022 9:20	5.36	ft
APCO-GSD-AP-MW-6	Oxidation Reduction Potention	5/10/2022 9:20	167.81	mv
APCO-GSD-AP-MW-6	pH	5/10/2022 9:20	5.51	SU
APCO-GSD-AP-MW-6	Temperature	5/10/2022 9:20	16.81	C
APCO-GSD-AP-MW-6	Turbidity	5/10/2022 9:20	0.41	NTU
APCO-GSD-AP-MW-6	Conductivity	5/10/2022 9:25	136.16	uS/cm
APCO-GSD-AP-MW-6	DO	5/10/2022 9:25	0.14	mg/L
APCO-GSD-AP-MW-6	Depth to Water Detail	5/10/2022 9:25	5.36	ft
APCO-GSD-AP-MW-6	Oxidation Reduction Potention	5/10/2022 9:25	159.47	mv
APCO-GSD-AP-MW-6	pH	5/10/2022 9:25	5.49	SU
APCO-GSD-AP-MW-6	Temperature	5/10/2022 9:25	16.8	C
APCO-GSD-AP-MW-6	Turbidity	5/10/2022 9:25	0.38	NTU
APCO-GSD-AP-MW-6	Conductivity	5/10/2022 9:30	135.84	uS/cm
APCO-GSD-AP-MW-6	DO	5/10/2022 9:30	0.12	mg/L
APCO-GSD-AP-MW-6	Depth to Water Detail	5/10/2022 9:30	5.36	ft
APCO-GSD-AP-MW-6	Oxidation Reduction Potention	5/10/2022 9:30	151.68	mv
APCO-GSD-AP-MW-6	pH	5/10/2022 9:30	5.51	SU
APCO-GSD-AP-MW-6	Sulfide	5/10/2022 9:30	0	mg/L
APCO-GSD-AP-MW-6	Temperature	5/10/2022 9:30	16.74	C
APCO-GSD-AP-MW-6	Turbidity	5/10/2022 9:30	0.42	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-7	Conductivity	5/10/2022 10:20	110.73	uS/cm
APCO-GSD-AP-MW-7	DO	5/10/2022 10:20	0.99	mg/L
APCO-GSD-AP-MW-7	Depth to Water Detail	5/10/2022 10:20	11.4	ft
APCO-GSD-AP-MW-7	Oxidation Reduction Potention	5/10/2022 10:20	150.35	mv
APCO-GSD-AP-MW-7	pH	5/10/2022 10:20	5.12	SU
APCO-GSD-AP-MW-7	Temperature	5/10/2022 10:20	19.69	C
APCO-GSD-AP-MW-7	Turbidity	5/10/2022 10:20	1.36	NTU
APCO-GSD-AP-MW-7	Conductivity	5/10/2022 10:25	115.9	uS/cm
APCO-GSD-AP-MW-7	DO	5/10/2022 10:25	0.7	mg/L
APCO-GSD-AP-MW-7	Depth to Water Detail	5/10/2022 10:25	11.4	ft
APCO-GSD-AP-MW-7	Oxidation Reduction Potention	5/10/2022 10:25	156.89	mv
APCO-GSD-AP-MW-7	pH	5/10/2022 10:25	5.05	SU
APCO-GSD-AP-MW-7	Temperature	5/10/2022 10:25	19.72	C
APCO-GSD-AP-MW-7	Turbidity	5/10/2022 10:25	0.73	NTU
APCO-GSD-AP-MW-7	Conductivity	5/10/2022 10:30	118.55	uS/cm
APCO-GSD-AP-MW-7	DO	5/10/2022 10:30	0.52	mg/L
APCO-GSD-AP-MW-7	Depth to Water Detail	5/10/2022 10:30	11.4	ft
APCO-GSD-AP-MW-7	Oxidation Reduction Potention	5/10/2022 10:30	157.7	mv
APCO-GSD-AP-MW-7	pH	5/10/2022 10:30	5.06	SU
APCO-GSD-AP-MW-7	Temperature	5/10/2022 10:30	19.5	C
APCO-GSD-AP-MW-7	Turbidity	5/10/2022 10:30	0.58	NTU
APCO-GSD-AP-MW-7	Conductivity	5/10/2022 10:35	118.31	uS/cm
APCO-GSD-AP-MW-7	DO	5/10/2022 10:35	0.47	mg/L
APCO-GSD-AP-MW-7	Depth to Water Detail	5/10/2022 10:35	11.4	ft
APCO-GSD-AP-MW-7	Oxidation Reduction Potention	5/10/2022 10:35	157.77	mv
APCO-GSD-AP-MW-7	pH	5/10/2022 10:35	5.08	SU
APCO-GSD-AP-MW-7	Sulfide	5/10/2022 10:35	0	mg/L
APCO-GSD-AP-MW-7	Temperature	5/10/2022 10:35	19.86	C
APCO-GSD-AP-MW-7	Turbidity	5/10/2022 10:35	0.63	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:27	320.38	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 11:27	0.3	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:27	22.11	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:27	-32.99	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:27	6.36	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:27	19.8	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:27	25.2	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:32	320.7	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 11:32	0.27	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:32	22.12	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:32	-41.87	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:32	6.22	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:32	19.74	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:32	13.1	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:37	321.68	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 11:37	0.25	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:37	22.13	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:37	-47.51	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:37	6.2	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:37	19.76	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:37	13.4	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:42	323.74	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 11:42	0.25	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:42	22.14	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:42	-52.72	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:42	6.22	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:42	19.87	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:42	11.21	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:47	324.06	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 11:47	0.25	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:47	22.14	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:47	-57.28	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:47	6.26	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:47	19.83	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:47	8.59	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:52	326.77	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 11:52	0.25	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:52	22.16	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:52	-61.81	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:52	6.31	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:52	19.95	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:52	11.14	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 11:57	329.98	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-10	DO	5/10/2022 11:57	0.25	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 11:57	22.18	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 11:57	-65.78	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 11:57	6.35	SU
APCO-GSD-AP-MW-10	Temperature	5/10/2022 11:57	19.74	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 11:57	7.22	NTU
APCO-GSD-AP-MW-10	Conductivity	5/10/2022 12:02	332.6	uS/cm
APCO-GSD-AP-MW-10	DO	5/10/2022 12:02	0.25	mg/L
APCO-GSD-AP-MW-10	Depth to Water Detail	5/10/2022 12:02	22.19	ft
APCO-GSD-AP-MW-10	Oxidation Reduction Potention	5/10/2022 12:02	-68.86	mv
APCO-GSD-AP-MW-10	pH	5/10/2022 12:02	6.39	SU
APCO-GSD-AP-MW-10	Sulfide	5/10/2022 12:02	0	mg/L
APCO-GSD-AP-MW-10	Temperature	5/10/2022 12:02	19.88	C
APCO-GSD-AP-MW-10	Turbidity	5/10/2022 12:02	4.85	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-12	Conductivity	5/10/2022 12:54	279.07	uS/cm
APCO-GSD-AP-MW-12	DO	5/10/2022 12:54	0.22	mg/L
APCO-GSD-AP-MW-12	Depth to Water Detail	5/10/2022 12:54	10.3	ft
APCO-GSD-AP-MW-12	Oxidation Reduction Potention	5/10/2022 12:54	55.21	mv
APCO-GSD-AP-MW-12	pH	5/10/2022 12:54	5.08	SU
APCO-GSD-AP-MW-12	Temperature	5/10/2022 12:54	18.09	C
APCO-GSD-AP-MW-12	Turbidity	5/10/2022 12:54	0.34	NTU
APCO-GSD-AP-MW-12	Conductivity	5/10/2022 12:59	442.54	uS/cm
APCO-GSD-AP-MW-12	DO	5/10/2022 12:59	0.18	mg/L
APCO-GSD-AP-MW-12	Depth to Water Detail	5/10/2022 12:59	10.3	ft
APCO-GSD-AP-MW-12	Oxidation Reduction Potention	5/10/2022 12:59	78.75	mv
APCO-GSD-AP-MW-12	pH	5/10/2022 12:59	4.85	SU
APCO-GSD-AP-MW-12	Temperature	5/10/2022 12:59	18.01	C
APCO-GSD-AP-MW-12	Turbidity	5/10/2022 12:59	0.38	NTU
APCO-GSD-AP-MW-12	Conductivity	5/10/2022 13:04	463.2	uS/cm
APCO-GSD-AP-MW-12	DO	5/10/2022 13:04	0.17	mg/L
APCO-GSD-AP-MW-12	Depth to Water Detail	5/10/2022 13:04	10.3	ft
APCO-GSD-AP-MW-12	Oxidation Reduction Potention	5/10/2022 13:04	88.4	mv
APCO-GSD-AP-MW-12	pH	5/10/2022 13:04	4.76	SU
APCO-GSD-AP-MW-12	Temperature	5/10/2022 13:04	17.96	C
APCO-GSD-AP-MW-12	Turbidity	5/10/2022 13:04	0.37	NTU
APCO-GSD-AP-MW-12	Conductivity	5/10/2022 13:09	461.01	uS/cm
APCO-GSD-AP-MW-12	DO	5/10/2022 13:09	0.17	mg/L
APCO-GSD-AP-MW-12	Depth to Water Detail	5/10/2022 13:09	10.3	ft
APCO-GSD-AP-MW-12	Oxidation Reduction Potention	5/10/2022 13:09	92.04	mv
APCO-GSD-AP-MW-12	pH	5/10/2022 13:09	4.75	SU
APCO-GSD-AP-MW-12	Temperature	5/10/2022 13:09	18	C
APCO-GSD-AP-MW-12	Turbidity	5/10/2022 13:09	0.41	NTU
APCO-GSD-AP-MW-12	Conductivity	5/10/2022 13:14	465.11	uS/cm
APCO-GSD-AP-MW-12	DO	5/10/2022 13:14	0.17	mg/L
APCO-GSD-AP-MW-12	Depth to Water Detail	5/10/2022 13:14	10.3	ft
APCO-GSD-AP-MW-12	Oxidation Reduction Potention	5/10/2022 13:14	92.7	mv
APCO-GSD-AP-MW-12	pH	5/10/2022 13:14	4.78	SU
APCO-GSD-AP-MW-12	Sulfide	5/10/2022 13:14	0	mg/L
APCO-GSD-AP-MW-12	Temperature	5/10/2022 13:14	17.98	C
APCO-GSD-AP-MW-12	Turbidity	5/10/2022 13:14	0.51	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 11:58	128.21	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 11:58	1.37	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 11:58	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 11:58	29.76	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 11:58	6.31	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 11:58	17.95	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 11:58	0.63	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:03	124.61	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:03	0.57	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:03	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:03	49.61	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:03	6.11	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:03	17.9	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:03	0.72	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:08	144.74	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:08	1.25	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:08	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:08	72.98	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:08	6.11	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:08	17.94	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:08	0.66	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:13	159.52	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:13	1.17	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:13	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:13	72.5	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:13	6.18	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:13	17.95	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:13	0.58	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:18	159.89	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:18	1.28	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:18	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:18	73.61	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:18	6.23	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:18	17.89	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:18	0.62	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:23	156.94	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:23	1.52	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:23	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:23	75.86	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:23	6.23	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:23	17.96	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:23	0.64	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:28	154.71	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:28	1.57	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:28	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:28	78.54	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:28	6.22	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:28	17.88	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:28	0.29	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:33	147.99	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:33	1.66	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:33	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:33	80.96	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:33	6.2	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:33	17.88	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:33	0.48	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:38	143.57	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:38	1.73	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:38	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:38	83.97	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:38	6.16	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:38	17.92	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:38	0.58	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:43	141.18	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:43	1.91	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:43	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:43	90.36	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:43	6.09	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:43	17.85	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:43	0.52	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:48	138.85	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:48	1.94	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:48	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:48	93.87	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:48	6.05	SU
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:48	17.78	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:48	0.76	NTU
APCO-GSD-AP-PZ-1	Conductivity	5/9/2022 12:53	138.65	uS/cm
APCO-GSD-AP-PZ-1	DO	5/9/2022 12:53	1.95	mg/L
APCO-GSD-AP-PZ-1	Depth to Water Detail	5/9/2022 12:53	6.78	ft
APCO-GSD-AP-PZ-1	Oxidation Reduction Potention	5/9/2022 12:53	95.65	mv
APCO-GSD-AP-PZ-1	pH	5/9/2022 12:53	6.03	SU
APCO-GSD-AP-PZ-1	Sulfide	5/9/2022 12:53	0	mg/L
APCO-GSD-AP-PZ-1	Temperature	5/9/2022 12:53	17.81	C
APCO-GSD-AP-PZ-1	Turbidity	5/9/2022 12:53	0.78	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-2	Conductivity	5/9/2022 15:05	70.29	uS/cm
APCO-GSD-AP-PZ-2	DO	5/9/2022 15:05	0.44	mg/L
APCO-GSD-AP-PZ-2	Depth to Water Detail	5/9/2022 15:05	8.64	ft
APCO-GSD-AP-PZ-2	Oxidation Reduction Potention	5/9/2022 15:05	152.45	mv
APCO-GSD-AP-PZ-2	pH	5/9/2022 15:05	4.21	SU
APCO-GSD-AP-PZ-2	Temperature	5/9/2022 15:05	18.14	C
APCO-GSD-AP-PZ-2	Turbidity	5/9/2022 15:05	2.44	NTU
APCO-GSD-AP-PZ-2	Conductivity	5/9/2022 15:10	71.94	uS/cm
APCO-GSD-AP-PZ-2	DO	5/9/2022 15:10	0.33	mg/L
APCO-GSD-AP-PZ-2	Depth to Water Detail	5/9/2022 15:10	8.86	ft
APCO-GSD-AP-PZ-2	Oxidation Reduction Potention	5/9/2022 15:10	171.7	mv
APCO-GSD-AP-PZ-2	pH	5/9/2022 15:10	4.01	SU
APCO-GSD-AP-PZ-2	Temperature	5/9/2022 15:10	17.86	C
APCO-GSD-AP-PZ-2	Turbidity	5/9/2022 15:10	1.37	NTU
APCO-GSD-AP-PZ-2	Conductivity	5/9/2022 15:15	72.23	uS/cm
APCO-GSD-AP-PZ-2	DO	5/9/2022 15:15	0.31	mg/L
APCO-GSD-AP-PZ-2	Depth to Water Detail	5/9/2022 15:15	9.06	ft
APCO-GSD-AP-PZ-2	Oxidation Reduction Potention	5/9/2022 15:15	178.05	mv
APCO-GSD-AP-PZ-2	pH	5/9/2022 15:15	4.09	SU
APCO-GSD-AP-PZ-2	Temperature	5/9/2022 15:15	17.86	C
APCO-GSD-AP-PZ-2	Turbidity	5/9/2022 15:15	1.23	NTU
APCO-GSD-AP-PZ-2	Conductivity	5/9/2022 15:20	71.87	uS/cm
APCO-GSD-AP-PZ-2	DO	5/9/2022 15:20	0.29	mg/L
APCO-GSD-AP-PZ-2	Depth to Water Detail	5/9/2022 15:20	9.26	ft
APCO-GSD-AP-PZ-2	Oxidation Reduction Potention	5/9/2022 15:20	179.86	mv
APCO-GSD-AP-PZ-2	pH	5/9/2022 15:20	4.21	SU
APCO-GSD-AP-PZ-2	Temperature	5/9/2022 15:20	17.84	C
APCO-GSD-AP-PZ-2	Turbidity	5/9/2022 15:20	1.11	NTU
APCO-GSD-AP-PZ-2	Conductivity	5/9/2022 15:25	72.44	uS/cm
APCO-GSD-AP-PZ-2	DO	5/9/2022 15:25	0.28	mg/L
APCO-GSD-AP-PZ-2	Depth to Water Detail	5/9/2022 15:25	9.34	ft
APCO-GSD-AP-PZ-2	Oxidation Reduction Potention	5/9/2022 15:25	181.47	mv
APCO-GSD-AP-PZ-2	pH	5/9/2022 15:25	4.3	SU
APCO-GSD-AP-PZ-2	Temperature	5/9/2022 15:25	17.91	C
APCO-GSD-AP-PZ-2	Turbidity	5/9/2022 15:25	1.09	NTU
APCO-GSD-AP-PZ-2	Conductivity	5/9/2022 15:30	73.49	uS/cm
APCO-GSD-AP-PZ-2	DO	5/9/2022 15:30	0.27	mg/L
APCO-GSD-AP-PZ-2	Depth to Water Detail	5/9/2022 15:30	9.34	ft
APCO-GSD-AP-PZ-2	Oxidation Reduction Potention	5/9/2022 15:30	183.19	mv
APCO-GSD-AP-PZ-2	pH	5/9/2022 15:30	4.35	SU
APCO-GSD-AP-PZ-2	Sulfide	5/9/2022 15:30	0	mg/L
APCO-GSD-AP-PZ-2	Temperature	5/9/2022 15:30	17.69	C
APCO-GSD-AP-PZ-2	Turbidity	5/9/2022 15:30	1.06	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-17	Conductivity	5/9/2022 13:11	282.43	uS/cm
APCO-GSD-AP-MW-17	DO	5/9/2022 13:11	1.63	mg/L
APCO-GSD-AP-MW-17	Depth to Water Detail	5/9/2022 13:11	19.86	ft
APCO-GSD-AP-MW-17	Oxidation Reduction Potention	5/9/2022 13:11	203.63	mv
APCO-GSD-AP-MW-17	pH	5/9/2022 13:11	7.45	SU
APCO-GSD-AP-MW-17	Temperature	5/9/2022 13:11	22.09	C
APCO-GSD-AP-MW-17	Turbidity	5/9/2022 13:11	5.49	NTU
APCO-GSD-AP-MW-17	Conductivity	5/9/2022 13:16	280.23	uS/cm
APCO-GSD-AP-MW-17	DO	5/9/2022 13:16	1.27	mg/L
APCO-GSD-AP-MW-17	Depth to Water Detail	5/9/2022 13:16	20.11	ft
APCO-GSD-AP-MW-17	Oxidation Reduction Potention	5/9/2022 13:16	204.27	mv
APCO-GSD-AP-MW-17	pH	5/9/2022 13:16	7.4	SU
APCO-GSD-AP-MW-17	Temperature	5/9/2022 13:16	22.37	C
APCO-GSD-AP-MW-17	Turbidity	5/9/2022 13:16	4.01	NTU
APCO-GSD-AP-MW-17	Conductivity	5/9/2022 13:21	278.65	uS/cm
APCO-GSD-AP-MW-17	DO	5/9/2022 13:21	1.11	mg/L
APCO-GSD-AP-MW-17	Depth to Water Detail	5/9/2022 13:21	20.34	ft
APCO-GSD-AP-MW-17	Oxidation Reduction Potention	5/9/2022 13:21	205.93	mv
APCO-GSD-AP-MW-17	pH	5/9/2022 13:21	7.38	SU
APCO-GSD-AP-MW-17	Temperature	5/9/2022 13:21	21.98	C
APCO-GSD-AP-MW-17	Turbidity	5/9/2022 13:21	2.99	NTU
APCO-GSD-AP-MW-17	Conductivity	5/9/2022 13:26	279.3	uS/cm
APCO-GSD-AP-MW-17	DO	5/9/2022 13:26	0.98	mg/L
APCO-GSD-AP-MW-17	Depth to Water Detail	5/9/2022 13:26	20.61	ft
APCO-GSD-AP-MW-17	Oxidation Reduction Potention	5/9/2022 13:26	204.73	mv
APCO-GSD-AP-MW-17	pH	5/9/2022 13:26	7.34	SU
APCO-GSD-AP-MW-17	Temperature	5/9/2022 13:26	22.39	C
APCO-GSD-AP-MW-17	Turbidity	5/9/2022 13:26	2.34	NTU
APCO-GSD-AP-MW-17	Conductivity	5/9/2022 13:31	279.17	uS/cm
APCO-GSD-AP-MW-17	DO	5/9/2022 13:31	0.93	mg/L
APCO-GSD-AP-MW-17	Depth to Water Detail	5/9/2022 13:31	20.75	ft
APCO-GSD-AP-MW-17	Oxidation Reduction Potention	5/9/2022 13:31	203.79	mv
APCO-GSD-AP-MW-17	pH	5/9/2022 13:31	7.32	SU
APCO-GSD-AP-MW-17	Temperature	5/9/2022 13:31	22.3	C
APCO-GSD-AP-MW-17	Turbidity	5/9/2022 13:31	1.96	NTU
APCO-GSD-AP-MW-17	Conductivity	5/9/2022 13:36	278.52	uS/cm
APCO-GSD-AP-MW-17	DO	5/9/2022 13:36	0.87	mg/L
APCO-GSD-AP-MW-17	Depth to Water Detail	5/9/2022 13:36	20.81	ft
APCO-GSD-AP-MW-17	Oxidation Reduction Potention	5/9/2022 13:36	199.69	mv
APCO-GSD-AP-MW-17	pH	5/9/2022 13:36	7.29	SU
APCO-GSD-AP-MW-17	Sulfide	5/9/2022 13:36	0	mg/L
APCO-GSD-AP-MW-17	Temperature	5/9/2022 13:36	22.33	C
APCO-GSD-AP-MW-17	Turbidity	5/9/2022 13:36	1.45	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-1	Conductivity	5/10/2022 8:17	1009.48	uS/cm
APCO-GSD-AP-MW-1	DO	5/10/2022 8:17	0.19	mg/L
APCO-GSD-AP-MW-1	Depth to Water Detail	5/10/2022 8:17	10.68	ft
APCO-GSD-AP-MW-1	Oxidation Reduction Potention	5/10/2022 8:17	134.95	mv
APCO-GSD-AP-MW-1	pH	5/10/2022 8:17	5.93	SU
APCO-GSD-AP-MW-1	Temperature	5/10/2022 8:17	16.28	C
APCO-GSD-AP-MW-1	Turbidity	5/10/2022 8:17	3.94	NTU
APCO-GSD-AP-MW-1	Conductivity	5/10/2022 8:22	1020.31	uS/cm
APCO-GSD-AP-MW-1	DO	5/10/2022 8:22	0.17	mg/L
APCO-GSD-AP-MW-1	Depth to Water Detail	5/10/2022 8:22	10.68	ft
APCO-GSD-AP-MW-1	Oxidation Reduction Potention	5/10/2022 8:22	134.08	mv
APCO-GSD-AP-MW-1	pH	5/10/2022 8:22	5.87	SU
APCO-GSD-AP-MW-1	Temperature	5/10/2022 8:22	16.31	C
APCO-GSD-AP-MW-1	Turbidity	5/10/2022 8:22	3.5	NTU
APCO-GSD-AP-MW-1	Conductivity	5/10/2022 8:27	1026.85	uS/cm
APCO-GSD-AP-MW-1	DO	5/10/2022 8:27	0.16	mg/L
APCO-GSD-AP-MW-1	Depth to Water Detail	5/10/2022 8:27	10.68	ft
APCO-GSD-AP-MW-1	Oxidation Reduction Potention	5/10/2022 8:27	135.4	mv
APCO-GSD-AP-MW-1	pH	5/10/2022 8:27	5.81	SU
APCO-GSD-AP-MW-1	Temperature	5/10/2022 8:27	16.33	C
APCO-GSD-AP-MW-1	Turbidity	5/10/2022 8:27	1.88	NTU
APCO-GSD-AP-MW-1	Conductivity	5/10/2022 8:32	1031.77	uS/cm
APCO-GSD-AP-MW-1	DO	5/10/2022 8:32	0.15	mg/L
APCO-GSD-AP-MW-1	Depth to Water Detail	5/10/2022 8:32	10.68	ft
APCO-GSD-AP-MW-1	Oxidation Reduction Potention	5/10/2022 8:32	137.1	mv
APCO-GSD-AP-MW-1	pH	5/10/2022 8:32	5.77	SU
APCO-GSD-AP-MW-1	Sulfide	5/10/2022 8:32	0	mg/L
APCO-GSD-AP-MW-1	Temperature	5/10/2022 8:32	16.34	C
APCO-GSD-AP-MW-1	Turbidity	5/10/2022 8:32	1.67	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-3	Conductivity	5/10/2022 13:06	548.32	uS/cm
APCO-GSD-AP-MW-3	DO	5/10/2022 13:06	0.17	mg/L
APCO-GSD-AP-MW-3	Depth to Water Detail	5/10/2022 13:06	12.06	ft
APCO-GSD-AP-MW-3	Oxidation Reduction Potention	5/10/2022 13:06	178.1	mv
APCO-GSD-AP-MW-3	pH	5/10/2022 13:06	5.93	SU
APCO-GSD-AP-MW-3	Temperature	5/10/2022 13:06	19.16	C
APCO-GSD-AP-MW-3	Turbidity	5/10/2022 13:06	0.66	NTU
APCO-GSD-AP-MW-3	Conductivity	5/10/2022 13:11	550.53	uS/cm
APCO-GSD-AP-MW-3	DO	5/10/2022 13:11	0.15	mg/L
APCO-GSD-AP-MW-3	Depth to Water Detail	5/10/2022 13:11	12.06	ft
APCO-GSD-AP-MW-3	Oxidation Reduction Potention	5/10/2022 13:11	175.56	mv
APCO-GSD-AP-MW-3	pH	5/10/2022 13:11	5.95	SU
APCO-GSD-AP-MW-3	Temperature	5/10/2022 13:11	19.01	C
APCO-GSD-AP-MW-3	Turbidity	5/10/2022 13:11	0.35	NTU
APCO-GSD-AP-MW-3	Conductivity	5/10/2022 13:16	551.87	uS/cm
APCO-GSD-AP-MW-3	DO	5/10/2022 13:16	0.14	mg/L
APCO-GSD-AP-MW-3	Depth to Water Detail	5/10/2022 13:16	12.06	ft
APCO-GSD-AP-MW-3	Oxidation Reduction Potention	5/10/2022 13:16	172.89	mv
APCO-GSD-AP-MW-3	pH	5/10/2022 13:16	5.95	SU
APCO-GSD-AP-MW-3	Temperature	5/10/2022 13:16	18.96	C
APCO-GSD-AP-MW-3	Turbidity	5/10/2022 13:16	0.48	NTU
APCO-GSD-AP-MW-3	Conductivity	5/10/2022 13:21	551.26	uS/cm
APCO-GSD-AP-MW-3	DO	5/10/2022 13:21	0.14	mg/L
APCO-GSD-AP-MW-3	Depth to Water Detail	5/10/2022 13:21	12.06	ft
APCO-GSD-AP-MW-3	Oxidation Reduction Potention	5/10/2022 13:21	169.73	mv
APCO-GSD-AP-MW-3	pH	5/10/2022 13:21	5.95	SU
APCO-GSD-AP-MW-3	Sulfide	5/10/2022 13:21	0	mg/L
APCO-GSD-AP-MW-3	Temperature	5/10/2022 13:21	19.09	C
APCO-GSD-AP-MW-3	Turbidity	5/10/2022 13:21	0.23	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:01	289.02	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:01	0.84	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:01	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:01	46.05	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:01	6.26	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:01	17.57	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:01	13.4	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:06	307.84	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:06	0.51	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:06	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:06	20.08	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:06	6.25	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:06	17.65	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:06	7.97	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:11	317.2	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:11	0.41	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:11	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:11	7.09	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:11	6.22	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:11	17.71	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:11	6.08	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:16	328.35	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:16	0.37	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:16	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:16	-1.62	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:16	6.22	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:16	17.76	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:16	3.44	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:21	338.32	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:21	0.33	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:21	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:21	-6.67	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:21	6.21	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:21	17.72	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:21	3.36	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:26	349.1	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:26	0.31	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:26	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:26	-11.92	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:26	6.23	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:26	17.75	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:26	3.37	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:31	354.78	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-8	DO	5/11/2022 8:31	0.29	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:31	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:31	-14.3	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:31	6.22	SU
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:31	17.78	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:31	2.41	NTU
APCO-GSD-AP-MW-8	Conductivity	5/11/2022 8:36	360.82	uS/cm
APCO-GSD-AP-MW-8	DO	5/11/2022 8:36	0.28	mg/L
APCO-GSD-AP-MW-8	Depth to Water Detail	5/11/2022 8:36	11.44	ft
APCO-GSD-AP-MW-8	Oxidation Reduction Potention	5/11/2022 8:36	-16.58	mv
APCO-GSD-AP-MW-8	pH	5/11/2022 8:36	6.25	SU
APCO-GSD-AP-MW-8	Sulfide	5/11/2022 8:36	0	mg/L
APCO-GSD-AP-MW-8	Temperature	5/11/2022 8:36	17.86	C
APCO-GSD-AP-MW-8	Turbidity	5/11/2022 8:36	1.71	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 9:39	206.19	uS/cm
APCO-GSD-AP-MW-9	DO	5/11/2022 9:39	0.55	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 9:39	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 9:39	118.31	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 9:39	6.6	SU
APCO-GSD-AP-MW-9	Temperature	5/11/2022 9:39	18.2	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 9:39	4.55	NTU
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 9:44	232.16	uS/cm
APCO-GSD-AP-MW-9	DO	5/11/2022 9:44	0.35	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 9:44	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 9:44	106.62	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 9:44	6.67	SU
APCO-GSD-AP-MW-9	Temperature	5/11/2022 9:44	18.32	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 9:44	2.67	NTU
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 9:49	253.51	uS/cm
APCO-GSD-AP-MW-9	DO	5/11/2022 9:49	0.29	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 9:49	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 9:49	64.81	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 9:49	6.75	SU
APCO-GSD-AP-MW-9	Temperature	5/11/2022 9:49	18.32	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 9:49	2.49	NTU
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 9:54	266.58	uS/cm
APCO-GSD-AP-MW-9	DO	5/11/2022 9:54	0.27	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 9:54	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 9:54	37.07	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 9:54	6.77	SU
APCO-GSD-AP-MW-9	Temperature	5/11/2022 9:54	18.34	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 9:54	1.61	NTU
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 9:59	274	uS/cm
APCO-GSD-AP-MW-9	DO	5/11/2022 9:59	0.26	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 9:59	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 9:59	21.5	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 9:59	6.73	SU
APCO-GSD-AP-MW-9	Temperature	5/11/2022 9:59	18.34	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 9:59	1.29	NTU
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 10:04	280.66	uS/cm
APCO-GSD-AP-MW-9	DO	5/11/2022 10:04	0.25	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 10:04	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 10:04	7.66	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 10:04	6.72	SU
APCO-GSD-AP-MW-9	Temperature	5/11/2022 10:04	18.3	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 10:04	1.24	NTU
APCO-GSD-AP-MW-9	Conductivity	5/11/2022 10:09	284.32	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-9	DO	5/11/2022 10:09	0.24	mg/L
APCO-GSD-AP-MW-9	Depth to Water Detail	5/11/2022 10:09	12.43	ft
APCO-GSD-AP-MW-9	Oxidation Reduction Potention	5/11/2022 10:09	-2.08	mv
APCO-GSD-AP-MW-9	pH	5/11/2022 10:09	6.7	SU
APCO-GSD-AP-MW-9	Sulfide	5/11/2022 10:09	0	mg/L
APCO-GSD-AP-MW-9	Temperature	5/11/2022 10:09	18.32	C
APCO-GSD-AP-MW-9	Turbidity	5/11/2022 10:09	1	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-5	Conductivity	5/10/2022 10:47	44.3	uS/cm
APCO-GSD-AP-PZ-5	DO	5/10/2022 10:47	4.21	mg/L
APCO-GSD-AP-PZ-5	Depth to Water Detail	5/10/2022 10:47	9.2	ft
APCO-GSD-AP-PZ-5	Oxidation Reduction Potention	5/10/2022 10:47	235.31	mv
APCO-GSD-AP-PZ-5	pH	5/10/2022 10:47	5.55	SU
APCO-GSD-AP-PZ-5	Temperature	5/10/2022 10:47	16.31	C
APCO-GSD-AP-PZ-5	Turbidity	5/10/2022 10:47	9.31	NTU
APCO-GSD-AP-PZ-5	Conductivity	5/10/2022 10:52	44.25	uS/cm
APCO-GSD-AP-PZ-5	DO	5/10/2022 10:52	4.19	mg/L
APCO-GSD-AP-PZ-5	Depth to Water Detail	5/10/2022 10:52	9.22	ft
APCO-GSD-AP-PZ-5	Oxidation Reduction Potention	5/10/2022 10:52	249.73	mv
APCO-GSD-AP-PZ-5	pH	5/10/2022 10:52	5.51	SU
APCO-GSD-AP-PZ-5	Temperature	5/10/2022 10:52	16.33	C
APCO-GSD-AP-PZ-5	Turbidity	5/10/2022 10:52	4.97	NTU
APCO-GSD-AP-PZ-5	Conductivity	5/10/2022 10:57	44.22	uS/cm
APCO-GSD-AP-PZ-5	DO	5/10/2022 10:57	4.19	mg/L
APCO-GSD-AP-PZ-5	Depth to Water Detail	5/10/2022 10:57	9.26	ft
APCO-GSD-AP-PZ-5	Oxidation Reduction Potention	5/10/2022 10:57	267.64	mv
APCO-GSD-AP-PZ-5	pH	5/10/2022 10:57	5.36	SU
APCO-GSD-AP-PZ-5	Temperature	5/10/2022 10:57	16.3	C
APCO-GSD-AP-PZ-5	Turbidity	5/10/2022 10:57	2.9	NTU
APCO-GSD-AP-PZ-5	Conductivity	5/10/2022 11:02	44.27	uS/cm
APCO-GSD-AP-PZ-5	DO	5/10/2022 11:02	4.19	mg/L
APCO-GSD-AP-PZ-5	Depth to Water Detail	5/10/2022 11:02	9.28	ft
APCO-GSD-AP-PZ-5	Oxidation Reduction Potention	5/10/2022 11:02	273.72	mv
APCO-GSD-AP-PZ-5	pH	5/10/2022 11:02	5.38	SU
APCO-GSD-AP-PZ-5	Sulfide	5/10/2022 11:02	0	mg/L
APCO-GSD-AP-PZ-5	Temperature	5/10/2022 11:02	16.28	C
APCO-GSD-AP-PZ-5	Turbidity	5/10/2022 11:02	2.49	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-PZ-6	Conductivity	5/10/2022 11:59	45.21	uS/cm
APCO-GSD-AP-PZ-6	DO	5/10/2022 11:59	5.9	mg/L
APCO-GSD-AP-PZ-6	Depth to Water Detail	5/10/2022 11:59	4.62	ft
APCO-GSD-AP-PZ-6	Oxidation Reduction Potention	5/10/2022 11:59	254.27	mv
APCO-GSD-AP-PZ-6	pH	5/10/2022 11:59	5.6	SU
APCO-GSD-AP-PZ-6	Temperature	5/10/2022 11:59	16.89	C
APCO-GSD-AP-PZ-6	Turbidity	5/10/2022 11:59	12.73	NTU
APCO-GSD-AP-PZ-6	Conductivity	5/10/2022 12:04	45.06	uS/cm
APCO-GSD-AP-PZ-6	DO	5/10/2022 12:04	5.89	mg/L
APCO-GSD-AP-PZ-6	Depth to Water Detail	5/10/2022 12:04	4.62	ft
APCO-GSD-AP-PZ-6	Oxidation Reduction Potention	5/10/2022 12:04	263.42	mv
APCO-GSD-AP-PZ-6	pH	5/10/2022 12:04	5.6	SU
APCO-GSD-AP-PZ-6	Temperature	5/10/2022 12:04	17	C
APCO-GSD-AP-PZ-6	Turbidity	5/10/2022 12:04	8.67	NTU
APCO-GSD-AP-PZ-6	Conductivity	5/10/2022 12:09	45.15	uS/cm
APCO-GSD-AP-PZ-6	DO	5/10/2022 12:09	5.85	mg/L
APCO-GSD-AP-PZ-6	Depth to Water Detail	5/10/2022 12:09	4.62	ft
APCO-GSD-AP-PZ-6	Oxidation Reduction Potention	5/10/2022 12:09	279.5	mv
APCO-GSD-AP-PZ-6	pH	5/10/2022 12:09	5.46	SU
APCO-GSD-AP-PZ-6	Temperature	5/10/2022 12:09	17.01	C
APCO-GSD-AP-PZ-6	Turbidity	5/10/2022 12:09	5.94	NTU
APCO-GSD-AP-PZ-6	Conductivity	5/10/2022 12:14	45.12	uS/cm
APCO-GSD-AP-PZ-6	DO	5/10/2022 12:14	5.89	mg/L
APCO-GSD-AP-PZ-6	Depth to Water Detail	5/10/2022 12:14	4.62	ft
APCO-GSD-AP-PZ-6	Oxidation Reduction Potention	5/10/2022 12:14	278.39	mv
APCO-GSD-AP-PZ-6	pH	5/10/2022 12:14	5.57	SU
APCO-GSD-AP-PZ-6	Sulfide	5/10/2022 12:14	0	mg/L
APCO-GSD-AP-PZ-6	Temperature	5/10/2022 12:14	16.91	C
APCO-GSD-AP-PZ-6	Turbidity	5/10/2022 12:14	4.78	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-14	Conductivity	5/9/2022 15:18	303.47	uS/cm
APCO-GSD-AP-MW-14	DO	5/9/2022 15:18	4.21	mg/L
APCO-GSD-AP-MW-14	Depth to Water Detail	5/9/2022 15:18	21.49	ft
APCO-GSD-AP-MW-14	Oxidation Reduction Potention	5/9/2022 15:18	353.63	mv
APCO-GSD-AP-MW-14	pH	5/9/2022 15:18	4.29	SU
APCO-GSD-AP-MW-14	Temperature	5/9/2022 15:18	18.22	C
APCO-GSD-AP-MW-14	Turbidity	5/9/2022 15:18	7.13	NTU
APCO-GSD-AP-MW-14	Conductivity	5/9/2022 15:23	294.95	uS/cm
APCO-GSD-AP-MW-14	DO	5/9/2022 15:23	4.15	mg/L
APCO-GSD-AP-MW-14	Depth to Water Detail	5/9/2022 15:23	21.49	ft
APCO-GSD-AP-MW-14	Oxidation Reduction Potention	5/9/2022 15:23	424.13	mv
APCO-GSD-AP-MW-14	pH	5/9/2022 15:23	3.77	SU
APCO-GSD-AP-MW-14	Temperature	5/9/2022 15:23	18.21	C
APCO-GSD-AP-MW-14	Turbidity	5/9/2022 15:23	3.18	NTU
APCO-GSD-AP-MW-14	Conductivity	5/9/2022 15:28	293.34	uS/cm
APCO-GSD-AP-MW-14	DO	5/9/2022 15:28	4.2	mg/L
APCO-GSD-AP-MW-14	Depth to Water Detail	5/9/2022 15:28	21.49	ft
APCO-GSD-AP-MW-14	Oxidation Reduction Potention	5/9/2022 15:28	460.67	mv
APCO-GSD-AP-MW-14	pH	5/9/2022 15:28	3.61	SU
APCO-GSD-AP-MW-14	Temperature	5/9/2022 15:28	17.86	C
APCO-GSD-AP-MW-14	Turbidity	5/9/2022 15:28	2.46	NTU
APCO-GSD-AP-MW-14	Conductivity	5/9/2022 15:33	290.55	uS/cm
APCO-GSD-AP-MW-14	DO	5/9/2022 15:33	4.21	mg/L
APCO-GSD-AP-MW-14	Depth to Water Detail	5/9/2022 15:33	21.49	ft
APCO-GSD-AP-MW-14	Oxidation Reduction Potention	5/9/2022 15:33	476.33	mv
APCO-GSD-AP-MW-14	pH	5/9/2022 15:33	3.6	SU
APCO-GSD-AP-MW-14	Temperature	5/9/2022 15:33	17.82	C
APCO-GSD-AP-MW-14	Turbidity	5/9/2022 15:33	2.23	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-18H	Conductivity	5/10/2022 9:33	144.58	uS/cm
APCO-GSD-AP-MW-18H	DO	5/10/2022 9:33	8	mg/L
APCO-GSD-AP-MW-18H	Depth to Water Detail	5/10/2022 9:33	9.38	ft
APCO-GSD-AP-MW-18H	Oxidation Reduction Potention	5/10/2022 9:33	230.18	mv
APCO-GSD-AP-MW-18H	pH	5/10/2022 9:33	5.01	SU
APCO-GSD-AP-MW-18H	Temperature	5/10/2022 9:33	15.83	C
APCO-GSD-AP-MW-18H	Turbidity	5/10/2022 9:33	3.2	NTU
APCO-GSD-AP-MW-18H	Conductivity	5/10/2022 9:38	145.06	uS/cm
APCO-GSD-AP-MW-18H	DO	5/10/2022 9:38	7.94	mg/L
APCO-GSD-AP-MW-18H	Depth to Water Detail	5/10/2022 9:38	9.38	ft
APCO-GSD-AP-MW-18H	Oxidation Reduction Potention	5/10/2022 9:38	255.47	mv
APCO-GSD-AP-MW-18H	pH	5/10/2022 9:38	4.95	SU
APCO-GSD-AP-MW-18H	Temperature	5/10/2022 9:38	15.84	C
APCO-GSD-AP-MW-18H	Turbidity	5/10/2022 9:38	1.16	NTU
APCO-GSD-AP-MW-18H	Conductivity	5/10/2022 9:43	146.45	uS/cm
APCO-GSD-AP-MW-18H	DO	5/10/2022 9:43	7.92	mg/L
APCO-GSD-AP-MW-18H	Depth to Water Detail	5/10/2022 9:43	9.38	ft
APCO-GSD-AP-MW-18H	Oxidation Reduction Potention	5/10/2022 9:43	273.72	mv
APCO-GSD-AP-MW-18H	pH	5/10/2022 9:43	4.9	SU
APCO-GSD-AP-MW-18H	Temperature	5/10/2022 9:43	15.85	C
APCO-GSD-AP-MW-18H	Turbidity	5/10/2022 9:43	1.14	NTU
APCO-GSD-AP-MW-18H	Conductivity	5/10/2022 9:48	148.54	uS/cm
APCO-GSD-AP-MW-18H	DO	5/10/2022 9:48	7.86	mg/L
APCO-GSD-AP-MW-18H	Depth to Water Detail	5/10/2022 9:48	9.38	ft
APCO-GSD-AP-MW-18H	Oxidation Reduction Potention	5/10/2022 9:48	288.35	mv
APCO-GSD-AP-MW-18H	pH	5/10/2022 9:48	4.87	SU
APCO-GSD-AP-MW-18H	Sulfide	5/10/2022 9:48	0	mg/L
APCO-GSD-AP-MW-18H	Temperature	5/10/2022 9:48	15.87	C
APCO-GSD-AP-MW-18H	Turbidity	5/10/2022 9:48	0.67	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 10:35	1083.16	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 10:35	0.14	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 10:35	14.71	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 10:35	-195.06	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 10:35	8.15	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 10:35	18.72	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 10:35	2.71	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 10:40	1062.85	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 10:40	0.16	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 10:40	18.31	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 10:40	-206.34	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 10:40	8.18	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 10:40	18.58	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 10:40	8.69	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 10:45	1139.59	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 10:45	0.16	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 10:45	22.68	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 10:45	-205.91	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 10:45	8.16	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 10:45	18.52	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 10:45	2.42	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 10:50	1124.58	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 10:50	0.17	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 10:50	29.03	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 10:50	-205.98	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 10:50	8.17	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 10:50	18.31	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 10:50	1.75	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 10:55	926.91	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 10:55	0.17	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 10:55	32.68	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 10:55	-199.38	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 10:55	8.16	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 10:55	18.5	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 10:55	2.43	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:00	957.26	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:00	0.19	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:00	37.44	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:00	-189.23	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:00	8.15	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:00	18.23	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:00	1.64	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:05	889.43	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:05	0.19	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:05	43.19	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:05	-185.17	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:05	8.17	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:05	18.48	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:05	1.23	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:10	867.83	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:10	0.32	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:10	43.46	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:10	-175.98	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:10	8.16	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:10	20.05	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:10	1.17	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:15	818.04	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:15	0.37	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:15	43.46	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:15	-177.34	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:15	8.34	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:15	20.19	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:15	1.69	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:20	830.14	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:20	0.27	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:20	44.19	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:20	-180.86	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:20	8.39	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:20	19.45	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:20	1.37	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:25	858.32	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:25	0.33	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:25	44.59	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:25	-176.55	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:25	8.34	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:25	19.7	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:25	1.35	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:30	767.57	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:30	0.3	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:30	44.89	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:30	-177.86	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:30	8.37	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:30	19.94	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:30	1.3	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:35	846.91	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:35	0.3	mg/L

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:35	45	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:35	-178.24	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:35	8.39	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:35	20.15	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:35	4.75	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:40	753.5	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:40	0.29	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:40	45.11	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:40	-179	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:40	8.43	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:40	20.28	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:40	1.18	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:45	924.11	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:45	0.38	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:45	45.19	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:45	-179.25	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:45	8.45	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:45	20.37	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:45	1.97	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:50	917.93	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:50	0.32	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:50	45.38	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:50	-177.63	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:50	8.45	SU
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:50	20.64	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:50	1.15	NTU
APCO-GSD-AP-MW-2VB	Conductivity	5/16/2022 11:55	905.13	uS/cm
APCO-GSD-AP-MW-2VB	DO	5/16/2022 11:55	0.37	mg/L
APCO-GSD-AP-MW-2VB	Depth to Water Detail	5/16/2022 11:55	45.41	ft
APCO-GSD-AP-MW-2VB	Oxidation Reduction Potention	5/16/2022 11:55	-177.5	mv
APCO-GSD-AP-MW-2VB	pH	5/16/2022 11:55	8.48	SU
APCO-GSD-AP-MW-2VB	Sulfide	5/16/2022 11:55	0	mg/L
APCO-GSD-AP-MW-2VB	Temperature	5/16/2022 11:55	20.6	C
APCO-GSD-AP-MW-2VB	Turbidity	5/16/2022 11:55	1.22	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-22VB	Conductivity	5/17/2022 8:59	385.39	uS/cm
APCO-GSD-AP-MW-22VB	DO	5/17/2022 8:59	0.17	mg/L
APCO-GSD-AP-MW-22VB	Depth to Water Detail	5/17/2022 8:59	5.43	ft
APCO-GSD-AP-MW-22VB	Oxidation Reduction Potention	5/17/2022 8:59	-140.82	mv
APCO-GSD-AP-MW-22VB	pH	5/17/2022 8:59	8.42	SU
APCO-GSD-AP-MW-22VB	Temperature	5/17/2022 8:59	17.3	C
APCO-GSD-AP-MW-22VB	Turbidity	5/17/2022 8:59	9.79	NTU
APCO-GSD-AP-MW-22VB	Conductivity	5/17/2022 9:04	381.65	uS/cm
APCO-GSD-AP-MW-22VB	DO	5/17/2022 9:04	0.16	mg/L
APCO-GSD-AP-MW-22VB	Depth to Water Detail	5/17/2022 9:04	5.7	ft
APCO-GSD-AP-MW-22VB	Oxidation Reduction Potention	5/17/2022 9:04	-144.43	mv
APCO-GSD-AP-MW-22VB	pH	5/17/2022 9:04	8.39	SU
APCO-GSD-AP-MW-22VB	Temperature	5/17/2022 9:04	17.25	C
APCO-GSD-AP-MW-22VB	Turbidity	5/17/2022 9:04	5.68	NTU
APCO-GSD-AP-MW-22VB	Conductivity	5/17/2022 9:09	391.43	uS/cm
APCO-GSD-AP-MW-22VB	DO	5/17/2022 9:09	0.16	mg/L
APCO-GSD-AP-MW-22VB	Depth to Water Detail	5/17/2022 9:09	5.82	ft
APCO-GSD-AP-MW-22VB	Oxidation Reduction Potention	5/17/2022 9:09	-145.71	mv
APCO-GSD-AP-MW-22VB	pH	5/17/2022 9:09	8.34	SU
APCO-GSD-AP-MW-22VB	Temperature	5/17/2022 9:09	17.22	C
APCO-GSD-AP-MW-22VB	Turbidity	5/17/2022 9:09	3.73	NTU
APCO-GSD-AP-MW-22VB	Conductivity	5/17/2022 9:14	396.46	uS/cm
APCO-GSD-AP-MW-22VB	DO	5/17/2022 9:14	0.17	mg/L
APCO-GSD-AP-MW-22VB	Depth to Water Detail	5/17/2022 9:14	5.91	ft
APCO-GSD-AP-MW-22VB	Oxidation Reduction Potention	5/17/2022 9:14	-144.13	mv
APCO-GSD-AP-MW-22VB	pH	5/17/2022 9:14	8.29	SU
APCO-GSD-AP-MW-22VB	Sulfide	5/17/2022 9:14	0	mg/L
APCO-GSD-AP-MW-22VB	Temperature	5/17/2022 9:14	17.09	C
APCO-GSD-AP-MW-22VB	Turbidity	5/17/2022 9:14	2.64	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:10	520.33	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:10	0.24	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:10	14.18	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:10	53.24	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:10	7.73	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:10	18.67	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:10	1.37	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:15	519.9	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:15	0.23	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:15	17.23	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:15	25.78	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:15	7.8	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:15	18.62	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:15	0.86	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:20	520.51	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:20	0.23	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:20	19.56	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:20	-2.93	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:20	7.88	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:20	18.66	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:20	0.65	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:25	520.27	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:25	0.25	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:25	22.3	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:25	-25.74	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:25	7.9	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:25	18.65	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:25	0.71	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:30	522.86	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:30	0.4	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:30	23.28	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:30	-47.55	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:30	8.03	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:30	20.58	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:30	0.59	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:35	523.57	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:35	0.53	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:35	23.48	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:35	-60.08	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:35	8.06	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:35	21.04	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:35	0.6	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:40	524.04	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:40	0.6	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:40	23.61	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:40	-67.93	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:40	8.1	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:40	21.2	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:40	0.61	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:45	524.15	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:45	0.63	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:45	23.76	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:45	-74.1	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:45	8.11	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:45	21.23	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:45	0.65	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:50	523.67	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:50	0.64	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:50	23.9	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:50	-79.95	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:50	8.12	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:50	21.43	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:50	0.54	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 10:55	516.64	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 10:55	0.63	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 10:55	24.05	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 10:55	-83.92	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 10:55	8.1	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 10:55	21.19	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 10:55	0.63	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 11:00	513.06	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 11:00	0.64	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 11:00	24.17	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 11:00	-88.01	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 11:00	8.11	SU
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 11:00	21.37	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 11:00	0.61	NTU
APCO-GSD-AP-MW-2VA	Conductivity	5/16/2022 11:05	511.85	uS/cm
APCO-GSD-AP-MW-2VA	DO	5/16/2022 11:05	0.64	mg/L
APCO-GSD-AP-MW-2VA	Depth to Water Detail	5/16/2022 11:05	24.26	ft
APCO-GSD-AP-MW-2VA	Oxidation Reduction Potention	5/16/2022 11:05	-90.42	mv
APCO-GSD-AP-MW-2VA	pH	5/16/2022 11:05	8.1	SU
APCO-GSD-AP-MW-2VA	Sulfide	5/16/2022 11:05	0	mg/L
APCO-GSD-AP-MW-2VA	Temperature	5/16/2022 11:05	21.28	C
APCO-GSD-AP-MW-2VA	Turbidity	5/16/2022 11:05	0.64	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 7:35	569.52	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 7:35	0.39	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 7:35	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 7:35	-15.4	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 7:35	6.31	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 7:35	19	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 7:35	100	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 7:40	560.14	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 7:40	0.24	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 7:40	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 7:40	-35.52	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 7:40	6.39	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 7:40	19.01	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 7:40	18.3	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 7:45	556.65	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 7:45	0.4	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 7:45	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 7:45	-38.4	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 7:45	6.41	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 7:45	19.03	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 7:45	11.93	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 7:50	556.33	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 7:50	0.53	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 7:50	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 7:50	-34.52	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 7:50	6.42	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 7:50	19.04	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 7:50	12.05	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 7:55	555.74	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 7:55	0.53	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 7:55	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 7:55	-34.54	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 7:55	6.43	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 7:55	19.07	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 7:55	8.17	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 8:00	556.5	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 8:00	0.45	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 8:00	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 8:00	-36.47	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 8:00	6.44	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 8:00	19.1	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 8:00	6.75	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 8:05	557.95	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-11	DO	5/17/2022 8:05	0.36	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 8:05	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 8:05	-38.94	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 8:05	6.43	SU
APCO-GSD-AP-MW-11	Temperature	5/17/2022 8:05	19.12	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 8:05	5.61	NTU
APCO-GSD-AP-MW-11	Conductivity	5/17/2022 8:10	559.32	uS/cm
APCO-GSD-AP-MW-11	DO	5/17/2022 8:10	0.29	mg/L
APCO-GSD-AP-MW-11	Depth to Water Detail	5/17/2022 8:10	9.61	ft
APCO-GSD-AP-MW-11	Oxidation Reduction Potention	5/17/2022 8:10	-41.99	mv
APCO-GSD-AP-MW-11	pH	5/17/2022 8:10	6.44	SU
APCO-GSD-AP-MW-11	Sulfide	5/17/2022 8:10	0	mg/L
APCO-GSD-AP-MW-11	Temperature	5/17/2022 8:10	19.12	C
APCO-GSD-AP-MW-11	Turbidity	5/17/2022 8:10	4.55	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-16	Conductivity	5/17/2022 6:31	396.31	uS/cm
APCO-GSD-AP-MW-16	DO	5/17/2022 6:31	4.55	mg/L
APCO-GSD-AP-MW-16	Depth to Water Detail	5/17/2022 6:31	25.38	ft
APCO-GSD-AP-MW-16	Oxidation Reduction Potention	5/17/2022 6:31	360.67	mv
APCO-GSD-AP-MW-16	pH	5/17/2022 6:31	4.24	SU
APCO-GSD-AP-MW-16	Temperature	5/17/2022 6:31	18.38	C
APCO-GSD-AP-MW-16	Turbidity	5/17/2022 6:31	13.6	NTU
APCO-GSD-AP-MW-16	Conductivity	5/17/2022 6:36	377.34	uS/cm
APCO-GSD-AP-MW-16	DO	5/17/2022 6:36	4.52	mg/L
APCO-GSD-AP-MW-16	Depth to Water Detail	5/17/2022 6:36	25.38	ft
APCO-GSD-AP-MW-16	Oxidation Reduction Potention	5/17/2022 6:36	371	mv
APCO-GSD-AP-MW-16	pH	5/17/2022 6:36	4.27	SU
APCO-GSD-AP-MW-16	Temperature	5/17/2022 6:36	18.51	C
APCO-GSD-AP-MW-16	Turbidity	5/17/2022 6:36	14.35	NTU
APCO-GSD-AP-MW-16	Conductivity	5/17/2022 6:41	365.55	uS/cm
APCO-GSD-AP-MW-16	DO	5/17/2022 6:41	4.5	mg/L
APCO-GSD-AP-MW-16	Depth to Water Detail	5/17/2022 6:41	25.38	ft
APCO-GSD-AP-MW-16	Oxidation Reduction Potention	5/17/2022 6:41	379.9	mv
APCO-GSD-AP-MW-16	pH	5/17/2022 6:41	4.3	SU
APCO-GSD-AP-MW-16	Temperature	5/17/2022 6:41	18.49	C
APCO-GSD-AP-MW-16	Turbidity	5/17/2022 6:41	5.85	NTU
APCO-GSD-AP-MW-16	Conductivity	5/17/2022 6:46	360.05	uS/cm
APCO-GSD-AP-MW-16	DO	5/17/2022 6:46	4.49	mg/L
APCO-GSD-AP-MW-16	Depth to Water Detail	5/17/2022 6:46	25.38	ft
APCO-GSD-AP-MW-16	Oxidation Reduction Potention	5/17/2022 6:46	388.56	mv
APCO-GSD-AP-MW-16	pH	5/17/2022 6:46	4.34	SU
APCO-GSD-AP-MW-16	Sulfide	5/17/2022 6:46	0	mg/L
APCO-GSD-AP-MW-16	Temperature	5/17/2022 6:46	18.47	C
APCO-GSD-AP-MW-16	Turbidity	5/17/2022 6:46	2.68	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:26	230.08	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:26	0.41	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:26	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:26	91.38	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:26	4.88	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:26	16.58	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:26	15.62	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:31	227.47	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:31	0.23	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:31	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:31	100.37	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:31	4.59	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:31	16.29	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:31	11.91	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:36	229.37	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:36	0.16	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:36	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:36	109.61	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:36	4.77	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:36	16.36	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:36	14.51	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:41	231.36	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:41	0.17	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:41	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:41	117.7	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:41	4.88	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:41	16.44	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:41	11.43	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:46	231.98	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:46	0.17	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:46	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:46	121.63	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:46	4.96	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:46	16.49	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:46	9.67	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:51	234.45	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:51	0.17	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:51	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:51	121.97	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:51	5.06	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:51	16.4	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:51	7.5	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 13:56	236.09	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-19H	DO	5/16/2022 13:56	0.17	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 13:56	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 13:56	121.83	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 13:56	5.14	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 13:56	16.41	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 13:56	6.11	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 14:01	238.15	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 14:01	0.17	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 14:01	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 14:01	121.75	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 14:01	5.21	SU
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 14:01	16.39	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 14:01	5.15	NTU
APCO-GSD-AP-MW-19H	Conductivity	5/16/2022 14:06	237.82	uS/cm
APCO-GSD-AP-MW-19H	DO	5/16/2022 14:06	0.18	mg/L
APCO-GSD-AP-MW-19H	Depth to Water Detail	5/16/2022 14:06	3.06	ft
APCO-GSD-AP-MW-19H	Oxidation Reduction Potention	5/16/2022 14:06	122.33	mv
APCO-GSD-AP-MW-19H	pH	5/16/2022 14:06	5.24	SU
APCO-GSD-AP-MW-19H	Sulfide	5/16/2022 14:06	0	mg/L
APCO-GSD-AP-MW-19H	Temperature	5/16/2022 14:06	16.3	C
APCO-GSD-AP-MW-19H	Turbidity	5/16/2022 14:06	4.65	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:20	614.7	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:20	0.16	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:20	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:20	15.99	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:20	5.79	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:20	17.32	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:20	30.1	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:25	615.67	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:25	0.16	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:25	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:25	25.59	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:25	5.71	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:25	17.39	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:25	23.4	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:30	616.04	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:30	0.15	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:30	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:30	30.97	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:30	5.67	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:30	17.42	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:30	11.9	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:35	615.53	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:35	0.16	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:35	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:35	33.83	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:35	5.66	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:35	17.38	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:35	14.32	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:40	616.43	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:40	0.16	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:40	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:40	35.01	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:40	5.66	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:40	17.39	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:40	9.32	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:45	615.75	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:45	0.16	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:45	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:45	36.17	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:45	5.68	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:45	17.4	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:45	5.9	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:50	616.38	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:50	0.16	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:50	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:50	36.94	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:50	5.7	SU
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:50	17.38	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:50	5.29	NTU
APCO-GSD-AP-MW-20H	Conductivity	5/17/2022 11:55	613.72	uS/cm
APCO-GSD-AP-MW-20H	DO	5/17/2022 11:55	0.15	mg/L
APCO-GSD-AP-MW-20H	Depth to Water Detail	5/17/2022 11:55	2.43	ft
APCO-GSD-AP-MW-20H	Oxidation Reduction Potention	5/17/2022 11:55	37.26	mv
APCO-GSD-AP-MW-20H	pH	5/17/2022 11:55	5.74	SU
APCO-GSD-AP-MW-20H	Sulfide	5/17/2022 11:55	0	mg/L
APCO-GSD-AP-MW-20H	Temperature	5/17/2022 11:55	17.29	C
APCO-GSD-AP-MW-20H	Turbidity	5/17/2022 11:55	3.94	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 8:43	1561.32	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 8:43	0.33	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 8:43	8.28	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 8:43	14.44	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 8:43	8.32	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 8:43	17.73	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 8:43	30.8	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 8:48	1558.55	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 8:48	0.22	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 8:48	9.17	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 8:48	0.21	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 8:48	8.39	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 8:48	17.87	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 8:48	22.2	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 8:53	1562.53	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 8:53	0.2	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 8:53	10.15	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 8:53	-15.86	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 8:53	8.42	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 8:53	17.82	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 8:53	17.2	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 8:58	1561.84	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 8:58	0.16	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 8:58	10.84	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 8:58	-32.04	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 8:58	8.45	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 8:58	17.83	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 8:58	11.4	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:03	1534.32	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:03	0.15	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:03	11.47	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:03	-45.66	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:03	8.45	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:03	17.89	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:03	12.86	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:08	1576.52	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:08	0.14	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:08	11.89	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:08	-58.75	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:08	8.46	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:08	17.87	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:08	10.01	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:13	1568.39	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:13	0.14	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:13	12.18	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:13	-68.03	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:13	8.43	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:13	17.99	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:13	10.76	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:18	1553.75	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:18	0.13	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:18	12.58	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:18	-77.52	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:18	8.43	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:18	18.1	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:18	9.46	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:23	1508.37	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:23	0.14	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:23	12.91	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:23	-83.49	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:23	8.39	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:23	18.03	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:23	9.24	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:28	1529.57	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:28	0.14	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:28	13.11	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:28	-90.9	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:28	8.39	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:28	18.18	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:28	9.67	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:33	1566.24	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:33	0.13	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:33	13.22	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:33	-96.33	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:33	8.38	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:33	18.29	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:33	7.12	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:38	1560.55	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:38	0.14	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:38	13.36	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:38	-99.95	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:38	8.35	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:38	18.26	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:38	8.19	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:43	1528.69	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:43	0.13	mg/L

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:43	13.55	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:43	-104.99	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:43	8.35	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:43	18.41	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:43	11.78	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:48	1487.38	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:48	0.14	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:48	13.68	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:48	-107.23	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:48	8.31	SU
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:48	18.35	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:48	7.17	NTU
APCO-GSD-AP-MW-21VC	Conductivity	5/17/2022 9:53	1488.31	uS/cm
APCO-GSD-AP-MW-21VC	DO	5/17/2022 9:53	0.13	mg/L
APCO-GSD-AP-MW-21VC	Depth to Water Detail	5/17/2022 9:53	13.8	ft
APCO-GSD-AP-MW-21VC	Oxidation Reduction Potention	5/17/2022 9:53	-111.63	mv
APCO-GSD-AP-MW-21VC	pH	5/17/2022 9:53	8.31	SU
APCO-GSD-AP-MW-21VC	Sulfide	5/17/2022 9:53	0	mg/L
APCO-GSD-AP-MW-21VC	Temperature	5/17/2022 9:53	18.49	C
APCO-GSD-AP-MW-21VC	Turbidity	5/17/2022 9:53	7.63	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:03	377.48	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:03	0.22	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:03	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:03	-9.81	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:03	5.94	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:03	17.43	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:03	66.5	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:08	385.16	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:08	0.19	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:08	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:08	-4.58	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:08	5.92	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:08	17.52	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:08	39.1	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:13	390.25	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:13	0.18	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:13	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:13	-4.67	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:13	5.96	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:13	17.56	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:13	23.7	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:18	397.59	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:18	0.17	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:18	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:18	-2.38	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:18	5.94	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:18	17.57	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:18	16.4	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:23	400.97	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:23	0.19	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:23	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:23	-0.99	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:23	5.92	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:23	17.56	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:23	14.5	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:28	402.29	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:28	0.22	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:28	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:28	1.25	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:28	5.93	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:28	17.62	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:28	11.87	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:33	407.17	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	DO	5/16/2022 11:33	0.22	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:33	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:33	2.24	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:33	5.93	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:33	17.71	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:33	10.57	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:38	410.06	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:38	0.22	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:38	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:38	2.97	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:38	5.94	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:38	17.73	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:38	8.07	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:43	412.99	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:43	0.21	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:43	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:43	2.33	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:43	5.97	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:43	17.77	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:43	8.21	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:48	414.44	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:48	0.21	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:48	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:48	1.1	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:48	6.01	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:48	17.82	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:48	7.06	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:53	415.51	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:53	0.21	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:53	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:53	-0.07	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:53	6.02	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:53	17.79	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:53	6.19	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 11:58	419.4	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 11:58	0.21	mg/L
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 11:58	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 11:58	-3.59	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 11:58	6.09	SU
APCO-GSD-AP-MW-2	Temperature	5/16/2022 11:58	17.64	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 11:58	5.64	NTU
APCO-GSD-AP-MW-2	Conductivity	5/16/2022 12:03	420.43	uS/cm
APCO-GSD-AP-MW-2	DO	5/16/2022 12:03	0.21	mg/L

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-2	Depth to Water Detail	5/16/2022 12:03	11.34	ft
APCO-GSD-AP-MW-2	Oxidation Reduction Potention	5/16/2022 12:03	-7.15	mv
APCO-GSD-AP-MW-2	pH	5/16/2022 12:03	6.16	SU
APCO-GSD-AP-MW-2	Sulfide	5/16/2022 12:03	0	mg/L
APCO-GSD-AP-MW-2	Temperature	5/16/2022 12:03	17.67	C
APCO-GSD-AP-MW-2	Turbidity	5/16/2022 12:03	6.16	NTU

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 13:47	440.42	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 13:47	0.31	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 13:47	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 13:47	-54.11	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 13:47	6.1	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 13:47	18.21	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 13:47	40.6	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 13:52	444.21	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 13:52	0.27	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 13:52	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 13:52	-56.62	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 13:52	6.1	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 13:52	18	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 13:52	26.2	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 13:57	445.25	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 13:57	0.26	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 13:57	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 13:57	-60.61	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 13:57	6.14	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 13:57	18.16	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 13:57	20.3	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:02	445.98	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:02	0.23	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:02	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:02	-65.23	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:02	6.2	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:02	18.12	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:02	16.5	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:07	445.72	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:07	0.23	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:07	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:07	-70.94	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:07	6.31	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:07	18.25	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:07	12.9	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:12	446.28	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:12	0.22	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:12	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:12	-77.37	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:12	6.38	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:12	18.22	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:12	11.2	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:17	445.08	uS/cm

Groundwater Field Parameters
Plant Gadsden Ash Pond

WELL ID	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GSD-AP-MW-4	DO	5/16/2022 14:17	0.22	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:17	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:17	-83.52	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:17	6.48	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:17	18.03	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:17	11.4	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:22	445.62	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:22	0.22	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:22	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:22	-87.47	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:22	6.53	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:22	18.12	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:22	9.59	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:27	443.84	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:27	0.22	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:27	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:27	-89.93	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:27	6.57	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:27	18.07	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:27	8.32	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:32	444.27	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:32	0.22	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:32	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:32	-89.25	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:32	6.56	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:32	18.14	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:32	6.97	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:37	443.09	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:37	0.22	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:37	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:37	-90.26	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:37	6.57	SU
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:37	18.26	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:37	5.6	NTU
APCO-GSD-AP-MW-4	Conductivity	5/16/2022 14:42	443.5	uS/cm
APCO-GSD-AP-MW-4	DO	5/16/2022 14:42	0.23	mg/L
APCO-GSD-AP-MW-4	Depth to Water Detail	5/16/2022 14:42	6.25	ft
APCO-GSD-AP-MW-4	Oxidation Reduction Potention	5/16/2022 14:42	-93.51	mv
APCO-GSD-AP-MW-4	pH	5/16/2022 14:42	6.61	SU
APCO-GSD-AP-MW-4	Sulfide	5/16/2022 14:42	0	mg/L
APCO-GSD-AP-MW-4	Temperature	5/16/2022 14:42	18.15	C
APCO-GSD-AP-MW-4	Turbidity	5/16/2022 14:42	5.4	NTU

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGADAP_1363

Project/Site : Gadsden Ash Pond
Gadsden, AL 35903

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

June 10, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between May 11, 2022 and May 18, 2022. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.06.10 09:42:57 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-06-10 14:28-05:00

REPORT OF LABORATORY ANALYSIS

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICP

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726197	WMWGADAP_1363
BC09093	726197	WMWGADAP_1363
BC09094	726197	WMWGADAP_1363
BC09095	726197	WMWGADAP_1363
BC09096	726197	WMWGADAP_1363
BC09097	726197	WMWGADAP_1363
BC09098	726197	WMWGADAP_1363
BC09099	726197	WMWGADAP_1363
BC09100	726197	WMWGADAP_1363
BC09101	726197	WMWGADAP_1363
BC09102	726198	WMWGADAP_1363
BC09103	726198	WMWGADAP_1363
BC09104	726198	WMWGADAP_1363
BC09105	726198	WMWGADAP_1363
BC09106	726198	WMWGADAP_1363
BC09107	726198	WMWGADAP_1363
BC09108	726198	WMWGADAP_1363
BC09109	726198	WMWGADAP_1363
BC09110	726198	WMWGADAP_1363
BC09111	726198	WMWGADAP_1363
BC09611	726846	WMWGADAP_1363
BC09612	726846	WMWGADAP_1363
BC09613	726846	WMWGADAP_1363
BC09614	726846	WMWGADAP_1363
BC09615	726846	WMWGADAP_1363
BC09616	726846	WMWGADAP_1363
BC09617	726846	WMWGADAP_1363
BC09618	726846	WMWGADAP_1363
BC09619	726846	WMWGADAP_1363
BC09620	726846	WMWGADAP_1363
BC09621	726847	WMWGADAP_1363

BC09622	726847	WMWGADAP_1363
BC09623	726847	WMWGADAP_1363
BC09624	726847	WMWGADAP_1363
BC09625	726847	WMWGADAP_1363

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed, and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC09101 Sodium MS/MSD spike levels were <30% of the sample concentrations.
    - BC09111 Calcium MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC09099	Calcium, Iron	10.15
BC09100	Calcium	10.15
BC09101	Sodium	10.15
BC09104	Calcium	10.15
BC09105	Calcium	10.15
BC09109	Calcium	10.15
BC09110	Calcium, Iron	10.15
BC09611	Calcium, Iron	10.15
BC09613	Iron	20.3
BC09614	Sodium	10.15
BC09617	Sodium	20.3
BC09618	Calcium	10.15
BC09621	Sodium	10.15
BC09623	Calcium, Iron	10.15
BC09624	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICP

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726147	WMWGADAP_1363
BC09093	726147	WMWGADAP_1363
BC09094	726147	WMWGADAP_1363
BC09096	726147	WMWGADAP_1363
BC09097	726147	WMWGADAP_1363
BC09098	726147	WMWGADAP_1363
BC09099	726147	WMWGADAP_1363
BC09100	726147	WMWGADAP_1363
BC09101	726147	WMWGADAP_1363
BC09102	726147	WMWGADAP_1363
BC09103	726148	WMWGADAP_1363
BC09104	726148	WMWGADAP_1363
BC09105	726148	WMWGADAP_1363
BC09106	726148	WMWGADAP_1363
BC09107	726148	WMWGADAP_1363
BC09108	726148	WMWGADAP_1363
BC09109	726148	WMWGADAP_1363
BC09110	726148	WMWGADAP_1363
BC09111	726148	WMWGADAP_1363
BC09611	726864	WMWGADAP_1363
BC09613	726864	WMWGADAP_1363
BC09614	726864	WMWGADAP_1363
BC09615	726864	WMWGADAP_1363
BC09616	726864	WMWGADAP_1363
BC09617	726864	WMWGADAP_1363
BC09618	726864	WMWGADAP_1363
BC09621	726864	WMWGADAP_1363
BC09622	726864	WMWGADAP_1363
BC09623	726865	WMWGADAP_1363
BC09624	726865	WMWGADAP_1363

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed, and all criteria were met.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were analyzed, and all criteria were met.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BC09623 Iron MS/MSD spike levels were <30% of the sample concentrations.
    - BC09624 Sodium MS/MSD spike levels were <30% of the sample concentrations.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC09099	Calcium, Iron	10.15
BC09100	Calcium	10.15
BC09101	Sodium	10.15
BC09104	Calcium	10.15
BC09105	Calcium	10.15
BC09109	Calcium	10.15
BC09110	Calcium, Iron	10.15
BC09611	Calcium, Iron	10.15
BC09613	Iron	20.3
BC09614	Sodium	10.15
BC09617	Sodium	10.15
BC09618	Calcium	10.15
BC09621	Sodium	10.15
BC09623	Calcium, Iron	10.15
BC09624	Sodium	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726457	WMWGADAP_1363
BC09093	726457	WMWGADAP_1363
BC09094	726457	WMWGADAP_1363
BC09095	726457	WMWGADAP_1363
BC09096	726457	WMWGADAP_1363
BC09097	726457	WMWGADAP_1363
BC09098	726457	WMWGADAP_1363
BC09099	726457	WMWGADAP_1363
BC09100	726457	WMWGADAP_1363
BC09101	726457	WMWGADAP_1363
BC09102	726458	WMWGADAP_1363
BC09103	726458	WMWGADAP_1363
BC09104	726458	WMWGADAP_1363
BC09105	726458	WMWGADAP_1363
BC09106	726458	WMWGADAP_1363
BC09107	726458	WMWGADAP_1363
BC09108	726458	WMWGADAP_1363
BC09109	726458	WMWGADAP_1363
BC09110	726458	WMWGADAP_1363
BC09111	726458	WMWGADAP_1363
BC09611	727444	WMWGADAP_1363
BC09612	727444	WMWGADAP_1363
BC09613	727444	WMWGADAP_1363
BC09614	727444	WMWGADAP_1363
BC09615	727444	WMWGADAP_1363
BC09616	727444	WMWGADAP_1363
BC09617	727444	WMWGADAP_1363
BC09618	727444	WMWGADAP_1363
BC09619	727444	WMWGADAP_1363
BC09620	727444	WMWGADAP_1363
BC09621	727445	WMWGADAP_1363

BC09622	727445	WMWGADAP_1363
BC09623	727445	WMWGADAP_1363
BC09624	727445	WMWGADAP_1363
BC09625	727445	WMWGADAP_1363

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high

standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC09100	Manganese	5.075
BC09103	Aluminum	92.365
BC09104	Manganese	5.075
BC09105	Manganese	5.075
BC09109	Manganese	92.365
BC09110	Manganese	5.075
BC09111	Manganese	5.075
BC09611	Manganese	10.15
BC09613	Manganese	5.075
BC09618	Manganese	92.365
BC09622	Aluminum	92.365

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726468	WMWGADAP_1363
BC09093	726468	WMWGADAP_1363
BC09094	726468	WMWGADAP_1363
BC09096	726468	WMWGADAP_1363
BC09097	726468	WMWGADAP_1363
BC09098	726468	WMWGADAP_1363
BC09099	726468	WMWGADAP_1363
BC09100	726468	WMWGADAP_1363
BC09101	726468	WMWGADAP_1363
BC09102	726468	WMWGADAP_1363
BC09103	726469	WMWGADAP_1363
BC09104	726469	WMWGADAP_1363
BC09105	726469	WMWGADAP_1363
BC09106	726469	WMWGADAP_1363
BC09107	726469	WMWGADAP_1363
BC09108	726469	WMWGADAP_1363
BC09109	726469	WMWGADAP_1363
BC09110	726469	WMWGADAP_1363
BC09111	726469	WMWGADAP_1363
BC09611	727444	WMWGADAP_1363
BC09613	727444	WMWGADAP_1363
BC09614	727444	WMWGADAP_1363
BC09615	727444	WMWGADAP_1363
BC09616	727444	WMWGADAP_1363
BC09617	727444	WMWGADAP_1363
BC09618	727444	WMWGADAP_1363
BC09621	727445	WMWGADAP_1363
BC09622	727445	WMWGADAP_1363
BC09623	727445	WMWGADAP_1363
BC09624	727445	WMWGADAP_1363

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC09100	Manganese	5.075
BC09103	Aluminum	92.365
BC09104	Manganese	5.075
BC09105	Manganese	5.075

BC09109	Manganese	92.365
BC09110	Manganese	5.075
BC09111	Manganese	5.075
BC09611	Manganese	10.15
BC09613	Manganese	5.075
BC09618	Manganese	92.365
BC09622	Aluminum	92.365

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Mercury

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726132	WMWGADAP_1363
BC09093	726132	WMWGADAP_1363
BC09094	726132	WMWGADAP_1363
BC09095	726132	WMWGADAP_1363
BC09096	726132	WMWGADAP_1363
BC09097	726132	WMWGADAP_1363
BC09098	726132	WMWGADAP_1363
BC09099	726132	WMWGADAP_1363
BC09100	726132	WMWGADAP_1363
BC09101	726133	WMWGADAP_1363
BC09102	726133	WMWGADAP_1363
BC09103	726133	WMWGADAP_1363
BC09104	726133	WMWGADAP_1363
BC09105	726133	WMWGADAP_1363
BC09106	726133	WMWGADAP_1363
BC09107	726133	WMWGADAP_1363
BC09108	726133	WMWGADAP_1363
BC09109	726133	WMWGADAP_1363
BC09110	726133	WMWGADAP_1363
BC09111	726133	WMWGADAP_1363
BC09611	727485	WMWGADAP_1363
BC09612	727485	WMWGADAP_1363
BC09613	727485	WMWGADAP_1363
BC09614	727485	WMWGADAP_1363
BC09615	727485	WMWGADAP_1363
BC09616	727485	WMWGADAP_1363
BC09617	727485	WMWGADAP_1363
BC09618	727485	WMWGADAP_1363
BC09619	727485	WMWGADAP_1363
BC09620	727485	WMWGADAP_1363
BC09621	727486	WMWGADAP_1363

BC09622	727486	WMWGADAP_1363
BC09623	727486	WMWGADAP_1363
BC09624	727486	WMWGADAP_1363
BC09625	727486	WMWGADAP_1363

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Nitrate-Nitrite

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726011	WMWGADAP_1363
BC09093	726011	WMWGADAP_1363
BC09094	726011	WMWGADAP_1363
BC09095	726011	WMWGADAP_1363
BC09096	726011	WMWGADAP_1363
BC09097	726011	WMWGADAP_1363
BC09098	726011	WMWGADAP_1363
BC09099	726011	WMWGADAP_1363
BC09100	726011	WMWGADAP_1363
BC09101	726011	WMWGADAP_1363
BC09102	726012	WMWGADAP_1363
BC09103	726012	WMWGADAP_1363
BC09104	726012	WMWGADAP_1363
BC09105	726012	WMWGADAP_1363
BC09106	726012	WMWGADAP_1363
BC09107	726012	WMWGADAP_1363
BC09108	726012	WMWGADAP_1363
BC09109	726012	WMWGADAP_1363
BC09110	726012	WMWGADAP_1363
BC09111	726012	WMWGADAP_1363
BC09611	726656	WMWGADAP_1363
BC09612	726656	WMWGADAP_1363
BC09613	726656	WMWGADAP_1363
BC09614	726656	WMWGADAP_1363
BC09615	726656	WMWGADAP_1363
BC09616	726656	WMWGADAP_1363
BC09617	726656	WMWGADAP_1363
BC09618	726656	WMWGADAP_1363
BC09619	726656	WMWGADAP_1363
BC09620	726656	WMWGADAP_1363
BC09621	727062	WMWGADAP_1363

BC09622	727062	WMWGADAP_1363
BC09623	727062	WMWGADAP_1363
BC09624	727062	WMWGADAP_1363
BC09625	727062	WMWGADAP_1363

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726675	WMWGADAP_1363
BC09093	726675	WMWGADAP_1363
BC09094	726675	WMWGADAP_1363
BC09095	726675	WMWGADAP_1363
BC09096	726675	WMWGADAP_1363
BC09097	726675	WMWGADAP_1363
BC09098	726675	WMWGADAP_1363
BC09099	726675	WMWGADAP_1363
BC09100	726675	WMWGADAP_1363
BC09101	726675	WMWGADAP_1363
BC09102	726676	WMWGADAP_1363
BC09103	726676	WMWGADAP_1363
BC09104	726676	WMWGADAP_1363
BC09105	726676	WMWGADAP_1363
BC09106	726676	WMWGADAP_1363
BC09107	726676	WMWGADAP_1363
BC09108	726676	WMWGADAP_1363
BC09109	726676	WMWGADAP_1363
BC09110	726676	WMWGADAP_1363
BC09111	726676	WMWGADAP_1363
BC09611	726677	WMWGADAP_1363
BC09612	726677	WMWGADAP_1363
BC09613	726677	WMWGADAP_1363
BC09614	726677	WMWGADAP_1363
BC09615	726677	WMWGADAP_1363
BC09616	726677	WMWGADAP_1363
BC09617	726677	WMWGADAP_1363
BC09618	726677	WMWGADAP_1363
BC09619	726677	WMWGADAP_1363
BC09620	726677	WMWGADAP_1363
BC09621	726678	WMWGADAP_1363

BC09622	726678	WMWGADAP_1363
BC09623	726678	WMWGADAP_1363
BC09624	726678	WMWGADAP_1363
BC09625	726678	WMWGADAP_1363

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Dissolved Solids

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726019	WMWGADAP_1363
BC09093	726019	WMWGADAP_1363
BC09094	726019	WMWGADAP_1363
BC09095	726019	WMWGADAP_1363
BC09096	726019	WMWGADAP_1363
BC09097	726019	WMWGADAP_1363
BC09098	726019	WMWGADAP_1363
BC09099	726019	WMWGADAP_1363
BC09100	726019	WMWGADAP_1363
BC09101	726019	WMWGADAP_1363
BC09102	726020	WMWGADAP_1363
BC09103	726020	WMWGADAP_1363
BC09104	726020	WMWGADAP_1363
BC09105	726020	WMWGADAP_1363
BC09106	726020	WMWGADAP_1363
BC09107	726020	WMWGADAP_1363
BC09108	726020	WMWGADAP_1363
BC09109	726020	WMWGADAP_1363
BC09110	726020	WMWGADAP_1363
BC09111	726020	WMWGADAP_1363
BC09611	726767	WMWGADAP_1363
BC09612	726767	WMWGADAP_1363
BC09613	726767	WMWGADAP_1363
BC09614	726767	WMWGADAP_1363
BC09615	726767	WMWGADAP_1363
BC09616	726767	WMWGADAP_1363
BC09617	726910	WMWGADAP_1363
BC09618	726910	WMWGADAP_1363
BC09619	726910	WMWGADAP_1363
BC09620	726910	WMWGADAP_1363
BC09621	726767	WMWGADAP_1363

BC09622	726910	WMWGADAP_1363
BC09623	726910	WMWGADAP_1363
BC09624	726910	WMWGADAP_1363
BC09625	726910	WMWGADAP_1363

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%, except for the following:
  - BC09616 Precision is invalid, sample and/or sample duplicate less than 5x the RL.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
  - BC09095
  - BC09612
  - BC09619
  - BC09620
  - BC09625

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Anions

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726070,726072,726370	WMWGADAP_1363
BC09093	726070,726072,726370	WMWGADAP_1363
BC09094	726070,726072,726370	WMWGADAP_1363
BC09095	726070,726072,726370	WMWGADAP_1363
BC09096	726070,726072,726370	WMWGADAP_1363
BC09097	726070,726072,726370	WMWGADAP_1363
BC09098	726070,726072,726370	WMWGADAP_1363
BC09099	726070,726072,726370	WMWGADAP_1363
BC09100	726070,726072,726370	WMWGADAP_1363
BC09101	726070,726072,726370	WMWGADAP_1363
BC09102	726071,726073,726371	WMWGADAP_1363
BC09103	726071,726073,726371	WMWGADAP_1363
BC09104	726071,726073,726371	WMWGADAP_1363
BC09105	726071,726073,726371	WMWGADAP_1363
BC09106	726071,726073,726371	WMWGADAP_1363
BC09107	726071,726073,726371	WMWGADAP_1363
BC09108	726071,726073,726371	WMWGADAP_1363
BC09109	726071,726073,726371	WMWGADAP_1363
BC09110	726071,726073,726371	WMWGADAP_1363
BC09111	726071,726073,726371	WMWGADAP_1363
BC09611	726880,726887,728609	WMWGADAP_1363
BC09612	726880,726887,728609	WMWGADAP_1363
BC09613	726880,726887,728609	WMWGADAP_1363
BC09614	726880,726887,728609	WMWGADAP_1363
BC09615	726880,726887,728609	WMWGADAP_1363
BC09616	726880,726887,728609	WMWGADAP_1363
BC09617	726880,726887,728609	WMWGADAP_1363
BC09618	726880,726887,728609	WMWGADAP_1363
BC09619	726880,726887,728609	WMWGADAP_1363
BC09620	726881,726888,728609	WMWGADAP_1363
BC09621	726881,726888,728610	WMWGADAP_1363

BC09622	726881,726888,728610	WMWGADAP_1363
BC09623	726881,726888,728610	WMWGADAP_1363
BC09624	726881,726888,728610	WMWGADAP_1363
BC09625	726881,726888,728610	WMWGADAP_1363

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC09100	Sulfate	10
BC09103	Sulfate	5
BC09104	Sulfate	25
BC09105	Sulfate	25
BC09106	Sulfate	2

BC09109	Sulfate	10
BC09611	Sulfate	5
BC09613	Sulfate	2
BC09615	Sulfate	2
BC09616	Sulfate	2
BC09617	Chloride, Fluoride	10,4
BC09618	Sulfate	10
BC09621	Chloride, Fluoride	4,2
BC09622	Sulfate	10
BC09623	Sulfate	10

8. The raw data results are shown with dilution factors included.
9. Fluoride may have potential matrix interference for the following:
   - BC09103
   - BC09622

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Gadsden Ash Pond

WMWGADAP_1363

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09092	726761,726762	WMWGADAP_1363
BC09093	726761,726762	WMWGADAP_1363
BC09094	726761,726762	WMWGADAP_1363
BC09096	726761,726762	WMWGADAP_1363
BC09097	726761,726762	WMWGADAP_1363
BC09098	726761,726762	WMWGADAP_1363
BC09099	726761,726762	WMWGADAP_1363
BC09100	726761,726762	WMWGADAP_1363
BC09101	727266,727267	WMWGADAP_1363
BC09102	726761,726762	WMWGADAP_1363
BC09103	726761,726762	WMWGADAP_1363
BC09104	727065,727066	WMWGADAP_1363
BC09105	727065,727066	WMWGADAP_1363
BC09106	727065,727066	WMWGADAP_1363
BC09107	727065,727066	WMWGADAP_1363
BC09108	727065,727066	WMWGADAP_1363
BC09109	727065,727066	WMWGADAP_1363
BC09110	727266,727267	WMWGADAP_1363
BC09111	727266,727267	WMWGADAP_1363
BC09611	727266,727267	WMWGADAP_1363
BC09613	727266,727267	WMWGADAP_1363
BC09614	727266,727267	WMWGADAP_1363
BC09615	727266,727267	WMWGADAP_1363
BC09616	727266,727267	WMWGADAP_1363
BC09617	727671,727672	WMWGADAP_1363
BC09618	727671,727672	WMWGADAP_1363
BC09621	727671,727672	WMWGADAP_1363
BC09622	727671,727672	WMWGADAP_1363
BC09623	727671,727672	WMWGADAP_1363
BC09624	727671,727672	WMWGADAP_1363

4. All of the above samples were prepared and analyzed by Standard Method 2320B, except for the following:
    - BC09103: Alkalinity could not be performed, pH below titration end point of 4.5 SU.
    - BC09622: Alkalinity could not be performed, pH below titration end point of 4.5 SU.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BC09104
    - BC09105
    - BC09617

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 5/9/22 12:56
Customer ID:
Submittal Date: 5/11/22 12:35

Laboratory ID Number: BC09092

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 09:45		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/16/22 02:10	5/19/22 09:45		1.015	18.9	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 09:45		1.015	0.0104	mg/L	0.008120	0.0406	J
* Lithium, Total	5/16/22 02:10	5/19/22 09:45		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 09:45		1.015	2.92	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 09:45		1	16.3	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 09:45		1.015	7.61	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 09:45		1.015	3.95	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	19.5	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	2.84	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:03		1	16.5	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	7.71	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:03		1.015	3.65	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 16:20		1.015	0.0570	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:20		1.015	0.000274	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:20		1.015	0.000139	mg/L	0.000068	0.000203	J
* Lead, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:20		1.015	0.00946	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:20		1.015	0.431	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 5/9/22 12:56
Customer ID:
Submittal Date: 5/11/22 12:35

Laboratory ID Number: BC09092

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	0.0561	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	0.000211	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	0.00270	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	0.000103	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	0.390	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:34	5/12/22 13:34		1	0.834	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	66.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	85.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	66.4	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 10:28	5/20/22 10:28		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 5/9/22 12:56
Customer ID:
Submittal Date: 5/11/22 12:35

Laboratory ID Number: BC09092

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:49	5/13/22 09:49		1	3.46	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:15	5/13/22 11:15		1	0.0824	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:40	5/17/22 12:40		1	2.51	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/9/22 12:53	5/9/22 12:53			138.65	uS/cm			FA
pH	5/9/22 12:53	5/9/22 12:53			6.03	SU			FA
Temperature	5/9/22 12:53	5/9/22 12:53			17.81	C			FA
Turbidity	5/9/22 12:53	5/9/22 12:53			0.78	NTU			FA
Sulfide	5/9/22 12:53	5/9/22 12:53			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 12:56
Customer ID:
Delivery Date: 5/11/22 12:35

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BC09092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 12:56
Customer ID:
Delivery Date: 5/11/22 12:35

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BC09092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 12:56
Customer ID:
Delivery Date: 5/11/22 12:35

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BC09092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/9/22 12:56
Customer ID:
Delivery Date: 5/11/22 12:35

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BC09092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 5/9/22 14:28
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09093

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 09:48		1.015	0.261	mg/L	0.030000	0.1015	
* Calcium, Total	5/16/22 02:10	5/19/22 09:48		1.015	38.4	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 09:48		1.015	0.171	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 09:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 09:48		1.015	8.36	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 09:48		1	15.0	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 09:48		1.015	7.01	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 09:48		1.015	14.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	0.244	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	39.9	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	0.0700	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	8.17	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:07		1	15.0	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	7.00	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:07		1.015	14.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.179	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.000083	mg/L	0.000081	0.000203	J
* Barium, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.236	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.000529	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.00101	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.165	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.000114	mg/L	0.000102	0.000203	J
* Potassium, Total	5/13/22 10:35	5/13/22 16:24		1.015	0.718	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 5/9/22 14:28
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09093

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.0000819	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.213	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.000245	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.000886	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.176	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.000141	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	0.683	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:09		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:36	5/12/22 13:36		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	142	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	174	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	141	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	0.917	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 10:46	5/20/22 10:46		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 5/9/22 14:28
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09093

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:50	5/13/22 09:50		1	6.81	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:16	5/13/22 11:16		1	0.0682	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:41	5/17/22 12:41		1	15.5	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/9/22 14:25	5/9/22 14:25			289.78	uS/cm			FA
pH	5/9/22 14:25	5/9/22 14:25			5.43	SU			FA
Temperature	5/9/22 14:25	5/9/22 14:25			17.72	C			FA
Turbidity	5/9/22 14:25	5/9/22 14:25			4.84	NTU			FA
Sulfide	5/9/22 14:25	5/9/22 14:25			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 14:28
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BC09093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 14:28
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BC09093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 14:28
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BC09093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/9/22 14:28
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BC09093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 5/9/22 15:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09094

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 09:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/16/22 02:10	5/19/22 09:51		1.015	7.02	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 09:51		1.015	0.122	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 09:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 09:51		1.015	2.44	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 09:51		1	16.5	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 09:51		1.015	7.73	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 09:51		1.015	5.80	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	8.06	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	0.0166	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	2.60	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:10		1	17.2	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	8.02	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:10		1.015	5.77	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.259	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.000101	mg/L	0.000081	0.000203	J
* Barium, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.0593	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:27		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.000617	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.00691	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.000178	mg/L	0.000068	0.000203	J
* Manganese, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.182	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:27		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:27		1.015	0.455	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 5/9/22 15:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09094

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:27		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:27		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.00676	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.0000944	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.0582	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.000233	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.00640	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.201	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	0.387	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:13		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:38	5/12/22 13:38		1	0.228	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	34.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	53.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	34.0	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 11:08	5/20/22 11:08		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 5/9/22 15:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09094

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:51	5/13/22 09:51		1	5.51	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:18	5/13/22 11:18		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:43	5/17/22 12:43		1	1.15	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/9/22 15:30	5/9/22 15:30			73.49	uS/cm			FA
pH	5/9/22 15:30	5/9/22 15:30			4.35	SU			FA
Temperature	5/9/22 15:30	5/9/22 15:30			17.69	C			FA
Turbidity	5/9/22 15:30	5/9/22 15:30			1.06	NTU			FA
Sulfide	5/9/22 15:30	5/9/22 15:30			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BC09094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BC09094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BC09094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BC09094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-1

Location Code: WMWGADAPFB
Collected: 5/9/22 16:00
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09095

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	5/16/22 02:10	5/19/22 09:54		1	Not Detected	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	5/16/22 02:10	5/19/22 09:54		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:17		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:40	5/12/22 13:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-1

Location Code: WMWGADAPFB
Collected: 5/9/22 16:00
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09095

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	5/20/22 11:29	5/20/22 11:29		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/13/22 09:52	5/13/22 09:52		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/13/22 11:19	5/13/22 11:19		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	5/17/22 12:44	5/17/22 12:44		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 5/9/22 16:00
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BC09095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 5/9/22 16:00
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BC09095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 5/9/22 16:00
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BC09095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 5/10/22 09:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09096

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 09:57		1.015	0.0681	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 09:57		1.015	10.8	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 09:57		1.015	0.0433	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 09:57		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 09:57		1.015	3.41	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 09:57		1	12.1	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 09:57		1.015	5.64	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 09:57		1.015	12.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	0.0593	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	11.2	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	0.0446	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	3.37	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:14		1	12.3	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	5.76	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:14		1.015	11.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 16:34		1.015	0.0762	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	5/13/22 10:35	5/13/22 16:34		1.015	0.00114	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:34		1.015	0.252	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:34		1.015	0.900	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 5/10/22 09:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09096

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	0.0688	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	0.000237	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	0.00102	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	0.260	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	0.841	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:21		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:42	5/12/22 13:42		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	48.9	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	73.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	48.5	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 11:50	5/20/22 11:50		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 5/10/22 09:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09096

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:54	5/13/22 09:54		1	8.87	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:20	5/13/22 11:20		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:45	5/17/22 12:45		1	14.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/10/22 09:30	5/10/22 09:30			135.84	uS/cm			FA
pH	5/10/22 09:30	5/10/22 09:30			5.51	SU			FA
Temperature	5/10/22 09:30	5/10/22 09:30			16.74	C			FA
Turbidity	5/10/22 09:30	5/10/22 09:30			0.42	NTU			FA
Sulfide	5/10/22 09:30	5/10/22 09:30			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BC09096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BC09096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BC09096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BC09096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6 Dup

Location Code: WMWGADAP
Collected: 5/10/22 09:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09097

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:00		1.015	0.0680	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 10:00		1.015	10.7	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:00		1.015	0.0448	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:00		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:00		1.015	3.45	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:00		1	11.9	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:00		1.015	5.57	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:00		1.015	12.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	0.0594	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	11.2	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	0.0437	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	3.41	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:17		1	12.3	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	5.76	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:17		1.015	12.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 16:38		1.015	0.0755	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	5/13/22 10:35	5/13/22 16:38		1.015	0.00109	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:38		1.015	0.248	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:38		1.015	0.898	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6 Dup

Location Code: WMWGADAP
Collected: 5/10/22 09:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09097

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	0.0000956	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	0.0667	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	0.000220	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	0.00104	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	0.262	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	0.869	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:25		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:44	5/12/22 13:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	46.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	83.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	46.3	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 12:08	5/20/22 12:08		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6 Dup

Location Code: WMWGADAP
Collected: 5/10/22 09:33
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09097

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:55	5/13/22 09:55		1	8.84	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:21	5/13/22 11:21		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:46	5/17/22 12:46		1	14.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/10/22 09:30	5/10/22 09:30			135.84	uS/cm			FA
pH	5/10/22 09:30	5/10/22 09:30			5.51	SU			FA
Temperature	5/10/22 09:30	5/10/22 09:30			16.74	C			FA
Turbidity	5/10/22 09:30	5/10/22 09:30			0.42	NTU			FA
Sulfide	5/10/22 09:30	5/10/22 09:30			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6 Dup

Laboratory ID Number: BC09097

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6 Dup

Laboratory ID Number: BC09097

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6 Dup

Laboratory ID Number: BC09097

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:33
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-6 Dup

Laboratory ID Number: BC09097

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 5/10/22 10:38
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09098

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:02		1.015	0.0465	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 10:02		1.015	9.95	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:02		1.015	0.0139	mg/L	0.008120	0.0406	J
* Lithium, Total	5/16/22 02:10	5/19/22 10:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:02		1.015	2.77	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:02		1	16.5	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:02		1.015	7.73	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:02		1.015	13.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	0.0384	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	10.2	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	2.74	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:20		1	16.9	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	7.90	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:20		1.015	13.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:41		1.015	0.00880	mg/L	0.006090	0.01015	J
* Arsenic, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 16:41		1.015	0.0527	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:41		1.015	0.000245	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:41		1.015	0.000400	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:41		1.015	0.0539	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:41		1.015	0.236	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 5/10/22 10:38
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09098

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	0.0492	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	0.000293	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	0.000298	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	0.0553	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	0.235	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:29		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:45	5/12/22 13:45		1	0.433	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	59.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	82.7	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	58.9	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 12:30	5/20/22 12:30		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 5/10/22 10:38
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09098

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:56	5/13/22 09:56		1	3.96	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:22	5/13/22 11:22		1	0.0627	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:47	5/17/22 12:47		1	7.13	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/10/22 10:35	5/10/22 10:35			118.31	uS/cm			FA
pH	5/10/22 10:35	5/10/22 10:35			5.08	SU			FA
Temperature	5/10/22 10:35	5/10/22 10:35			19.86	C			FA
Turbidity	5/10/22 10:35	5/10/22 10:35			0.63	NTU			FA
Sulfide	5/10/22 10:35	5/10/22 10:35			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 10:38
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BC09098

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 10:38
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BC09098

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 10:38
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BC09098

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 10:38
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BC09098

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 5/10/22 12:05
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09099

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***					***Preparation Method: EPA 1638***			
* Boron, Total	5/16/22 02:10	5/19/22 10:05		1.015	0.0970	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 11:07		10.15	42.2	mg/L	0.70035	4.06	
* Iron, Total	5/16/22 02:10	5/19/22 11:07		10.15	20.6	mg/L	0.08120	0.406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:05		1.015	6.45	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:05		1	35.1	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:05		1.015	16.4	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:05		1.015	13.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:24		1.015	0.0998	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:37		10.15	42.7	mg/L	0.70035	4.06	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:37		10.15	20.6	mg/L	0.08120	0.406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:24		1.015	6.41	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:24		1	36.0	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:24		1.015	16.8	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:24		1.015	12.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	5/13/22 10:35	5/13/22 16:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.00792	mg/L	0.006090	0.01015	J
* Arsenic, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.00361	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.318	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.000305	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.000907	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.671	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.000466	mg/L	0.000102	0.000203	
* Potassium, Total	5/13/22 10:35	5/13/22 16:45		1.015	0.608	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 5/10/22 12:05
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09099

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.00307	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.289	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.000263	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.000811	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.698	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.000417	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	0.590	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:47	5/12/22 13:47		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	162	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	199	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	160	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	1.73	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 12:50	5/20/22 12:50		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 5/10/22 12:05
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09099

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:57	5/13/22 09:57		1	5.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:24	5/13/22 11:24		1	0.0918	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:49	5/17/22 12:49		1	11.6	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/10/22 12:02	5/10/22 12:02			332.60	uS/cm			FA
pH	5/10/22 12:02	5/10/22 12:02			6.39	SU			FA
Temperature	5/10/22 12:02	5/10/22 12:02			19.88	C			FA
Turbidity	5/10/22 12:02	5/10/22 12:02			4.85	NTU			FA
Sulfide	5/10/22 12:02	5/10/22 12:02			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:05
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BC09099

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:05
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BC09099

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:05
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BC09099

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:05
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BC09099

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 5/10/22 13:17
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09100

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:08		1.015	0.0660	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 11:09		10.15	48.2	mg/L	0.70035	4.06	
* Iron, Total	5/16/22 02:10	5/19/22 10:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/16/22 02:10	5/19/22 10:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:08		1.015	23.6	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:08		1	17.9	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:08		1.015	8.36	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:08		1.015	15.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:27		1.015	0.0578	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:40		10.15	49.7	mg/L	0.70035	4.06	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:27		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:27		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:27		1.015	23.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:27		1	18.5	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:27		1.015	8.64	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:27		1.015	15.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 16:49		1.015	0.0377	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:49		1.015	0.000332	mg/L	0.000068	0.000203	
* Chromium, Total	5/13/22 10:35	5/13/22 16:49		1.015	0.000414	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:49		1.015	0.00490	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/16/22 13:25		5.075	1.64	mg/L	0.000761	0.001015	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 16:49		1.015	0.827	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 5/10/22 13:17
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09100

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	0.0360	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	0.000290	mg/L	0.000068	0.000203	
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	0.000356	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	0.00446	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 17:15		5.075	1.70	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	0.810	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:49	5/12/22 13:49		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	36.8	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	319	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	36.5	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 13:08	5/20/22 13:08		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 5/10/22 13:17
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09100

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 09:58	5/13/22 09:58		1	5.64	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:25	5/13/22 11:25		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:55	5/17/22 12:55		10	193	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/10/22 13:14	5/10/22 13:14			465.11	uS/cm			FA
pH	5/10/22 13:14	5/10/22 13:14			4.78	SU			FA
Temperature	5/10/22 13:14	5/10/22 13:14			17.98	C			FA
Turbidity	5/10/22 13:14	5/10/22 13:14			0.51	NTU			FA
Sulfide	5/10/22 13:14	5/10/22 13:14			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:17
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BC09100

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:17
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BC09100

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:17
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BC09100

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:17
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BC09100

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 5/11/22 09:11
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09101

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:11		1.015	0.0620	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 10:11		1.015	22.6	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:11		1.015	0.418	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:11		1.015	0.0187	mg/L	0.007105	0.01999956	J
* Magnesium, Total	5/16/22 02:10	5/19/22 10:11		1.015	5.61	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:11		1	19.6	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:11		1.015	9.18	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 11:12		10.15	60.6	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:30		1.015	0.0531	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:30		1.015	23.1	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:30		1.015	0.384	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:30		1.015	0.0201	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:30		1.015	5.57	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:30		1	20.1	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:30		1.015	9.40	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:43		10.15	58.6	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.0373	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.000309	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.525	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.000239	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.0461	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.00135	mg/L	0.000102	0.000203	
* Potassium, Total	5/13/22 10:35	5/13/22 16:52		1.015	0.827	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 5/11/22 09:11
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09101

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	0.000283	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	0.488	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	0.000236	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	0.0464	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	0.00111	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	0.768	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 15:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 17:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 13:51	5/12/22 13:51		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	215	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	220	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	211	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	4.33	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 13:31	5/20/22 13:31		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 5/11/22 09:11
Customer ID:
Submittal Date: 5/11/22 12:36

Laboratory ID Number: BC09101

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:00	5/13/22 10:00		1	5.48	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:26	5/13/22 11:26		1	0.175	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 12:51	5/17/22 12:51		1	1.73	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/11/22 09:08	5/11/22 09:08			361.94	uS/cm			FA
pH	5/11/22 09:08	5/11/22 09:08			7.91	SU			FA
Temperature	5/11/22 09:08	5/11/22 09:08			18.45	C			FA
Turbidity	5/11/22 09:08	5/11/22 09:08			1.75	NTU			FA
Sulfide	5/11/22 09:08	5/11/22 09:08			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 09:11
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BC09101

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09101	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.143	0.146	0.106	0.0850 to 0.115	106	70.0 to 130	2.08	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09101	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.110	0.107	0.0949	0.0850 to 0.115	110	70.0 to 130	2.76	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09101	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.102	0.103	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09101	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.644	0.637	0.100	0.0850 to 0.115	119	70.0 to 130	1.09	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09101	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.103	0.104	0.104	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09101	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.11	1.09	1.02	0.850 to 1.15	105	70.0 to 130	1.82	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09101	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09101	Calcium, Total	mg/L	0.0100	0.152	5.00	27.4	27.3	4.90	4.25 to 5.75	96.0	70.0 to 130	0.366	20.0
BC09101	Chloride	mg/L	-0.0339	1.00	10.0	15.6	15.6	9.97	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09101	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.105	0.105	0.105	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09101	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.107	0.107	0.109	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BC09101	Fluoride	mg/L	0.0136	0.125	2.50	2.76	2.74	2.62	2.25 to 2.75	103	80.0 to 120	0.727	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 09:11
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BC09101

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Iron, Total	mg/L	0.000304	0.0176	0.2	0.622	0.610	0.205	0.170 to 0.230	102	70.0 to 130	1.95	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09101	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09101	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.226	0.221	0.206	0.170 to 0.230	104	70.0 to 130	2.24	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09101	Magnesium, Total	mg/L	0.00217	0.0462	5.00	10.8	10.7	5.25	4.25 to 5.75	104	70.0 to 130	0.930	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09101	Manganese, Total	mg/L	0.000193	0.0002	0.100	0.143	0.144	0.0973	0.0850 to 0.115	96.9	70.0 to 130	0.697	20.0
BC09101	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00409	0.0041	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09101	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09101	Potassium, Total	mg/L	-0.0174	0.367	10.0	11.2	11.4	10.8	8.50 to 11.5	104	70.0 to 130	1.77	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09101	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.104	0.102	0.103	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09101	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.3	10.2	1.02	0.850 to 1.15	112	70.0 to 130	0.976	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09101	Sodium, Total	mg/L	0.00237	0.0660	5.00	63.9	64.7	5.23	4.25 to 5.75	66.0	70.0 to 130	1.24	20.0
BC09101	Sulfate	mg/L	-0.159	2.0	20.0	22.1	22.4	20.3	18.0 to 22.0	102	80.0 to 120	1.35	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 09:11
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BC09101

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09101	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.110	0.109	0.110	0.0850 to 0.115	110	70.0 to 130	0.913	20.0
BC09101	Total Organic Carbon	mg/L	0.322	1.00	10.0	10.9	10.7	10.1		109	80.0 to 120	1.85	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/11/22 09:11
Customer ID:
Delivery Date: 5/11/22 12:36

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BC09101

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09101	Nitrogen, Nitrate/Nitrite	mg/L as N	0.05	0.200	2.00	2.07	0.063	1.98	1.80 to 2.20	104	90.0 to 110	0.00	15.0
BC09101	Solids, Dissolved	mg/L	1.00	25.0			213	50.0	40.0 to 60.0			3.23	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 5/9/22 13:40
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09102

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:26		1.015	0.0347	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 10:26		1.015	28.4	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:26		1.015	0.0191	mg/L	0.008120	0.0406	J
* Lithium, Total	5/16/22 02:10	5/19/22 10:26		1.015	0.00859	mg/L	0.007105	0.01999956	J
* Magnesium, Total	5/16/22 02:10	5/19/22 10:26		1.015	5.33	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:26		1	17.6	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:26		1.015	8.23	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:26		1.015	27.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	28.9	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	0.00870	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	5.21	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:34		1	17.8	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	8.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:34		1.015	25.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.0102	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.000233	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.309	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:14		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.000257	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.000113	mg/L	0.000068	0.000203	J
* Lead, Total	5/13/22 10:35	5/13/22 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.0147	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.000465	mg/L	0.000102	0.000203	
* Potassium, Total	5/13/22 10:35	5/13/22 17:14		1.015	0.492	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 5/9/22 13:40
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09102

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:14		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:14		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.000222	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.290	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.000283	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.000105	mg/L	0.000068	0.000203	J
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.0180	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.000468	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	0.515	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:00	5/12/22 14:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/20/22 10:28	5/20/22 14:48		1	162	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	152	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	159	mg/L			
Carbonate Alkalinity, (calc.)	5/20/22 10:28	5/20/22 14:48		1	2.43	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 15:00	5/20/22 15:00		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 5/9/22 13:40
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09102

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:12	5/13/22 10:12		1	3.01	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:39	5/13/22 11:39		1	0.191	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:04	5/17/22 13:04		1	10.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/9/22 13:36	5/9/22 13:36			278.52	uS/cm			FA
pH	5/9/22 13:36	5/9/22 13:36			7.29	SU			FA
Temperature	5/9/22 13:36	5/9/22 13:36			22.33	C			FA
Turbidity	5/9/22 13:36	5/9/22 13:36			1.45	NTU			FA
Sulfide	5/9/22 13:36	5/9/22 13:36			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 13:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BC09102

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.105	0.106	0.101	0.0850 to 0.115	105	70.0 to 130	0.948	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09102	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0946	0.0954	0.0899	0.0850 to 0.115	94.6	70.0 to 130	0.842	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09102	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0999	0.101	0.101	0.0850 to 0.115	99.7	70.0 to 130	1.10	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09102	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.379	0.385	0.0948	0.0850 to 0.115	89.0	70.0 to 130	1.57	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09102	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0953	0.0945	0.0962	0.0850 to 0.115	95.3	70.0 to 130	0.843	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09102	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.03	1.03	0.988	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09102	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0972	0.0985	0.0998	0.0850 to 0.115	97.2	70.0 to 130	1.33	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09102	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	33.9	33.5	5.05	4.25 to 5.75	100	70.0 to 130	1.19	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09102	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0998	0.0994	0.0985	0.0850 to 0.115	99.5	70.0 to 130	0.402	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09102	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09102	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	0.204	0.202	0.200	0.170 to 0.230	102	70.0 to 130	0.985	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 13:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BC09102

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09102	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0990	0.0990	0.101	0.0850 to 0.115	99.0	70.0 to 130	0.00	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09102	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.213	0.212	0.198	0.170 to 0.230	102	70.0 to 130	0.471	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09102	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	10.4	10.2	5.20	4.25 to 5.75	104	70.0 to 130	1.94	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09102	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	0.121	0.121	0.102	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09102	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0967	0.0984	0.0983	0.0850 to 0.115	96.2	70.0 to 130	1.74	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09102	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	10.5	10.5	9.85	8.50 to 11.5	99.8	70.0 to 130	0.00	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09102	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.100	0.100	0.103	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09102	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	9.39	9.36	1.02	0.850 to 1.15	107	70.0 to 130	0.320	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09102	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	30.1	30.2	4.99	4.25 to 5.75	98.0	70.0 to 130	0.332	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09102	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 13:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BC09102

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/9/22 13:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BC09102

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09102	Alkalinity, Total as CaCO3	mg/L					148	50.3	45.0 to 55.0			9.03	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 5/9/22 15:37
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09103

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:29		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/16/22 02:10	5/19/22 10:29		1.015	14.5	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:29		1.015	0.0197	mg/L	0.008120	0.0406	J
* Lithium, Total	5/16/22 02:10	5/19/22 10:29		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:29		1.015	5.93	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:29		1	8.88	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:29		1.015	4.15	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:29		1.015	2.64	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	15.0	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	5.97	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:51		1	9.24	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	4.32	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:51		1.015	2.62	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/16/22 13:29		92.365	13.8	mg/L	0.554190	0.92365	
* Arsenic, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.00274	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.0365	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.00126	mg/L	0.000406	0.001015	
* Cadmium, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.000627	mg/L	0.000068	0.000203	
* Chromium, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.000868	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.0416	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.00194	mg/L	0.000068	0.000203	
* Manganese, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.552	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:17		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.376	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 5/9/22 15:37
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09103

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:17		1.015	0.00394	mg/L	0.000508	0.001015	
* Thallium, Total	5/13/22 10:35	5/13/22 17:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 17:19		92.365	13.1	mg/L	0.554190	0.92365	
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.00272	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.0333	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.00132	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.000560	mg/L	0.000068	0.000203	
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.000706	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.0383	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.00212	mg/L	0.000068	0.000203	
* Manganese, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.549	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.341	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	0.00505	mg/L	0.000508	0.001015	
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:04		1	0.00039	mg/L	0.0003	0.0005	J
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:02	5/12/22 14:02		1	0.487	mg/L as N	0.20	0.3	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	185	mg/L		25	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 15:23	5/20/22 15:23		1	1.06	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:13	5/13/22 10:13		1	3.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:40	5/13/22 11:40		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:18	5/17/22 13:18		5	125	mg/L	3.0	10	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 5/9/22 15:37
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09103

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/9/22 15:33	5/9/22 15:33			290.55	uS/cm			FA
pH	5/9/22 15:33	5/9/22 15:33			3.60	SU			FA
Temperature	5/9/22 15:33	5/9/22 15:33			17.82	C			FA
Turbidity	5/9/22 15:33	5/9/22 15:33			2.23	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:37
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BC09103

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:37
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BC09103

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:37
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BC09103

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/9/22 15:37
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BC09103

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 5/10/22 08:35
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09104

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:32		1.015	0.954	mg/L	0.030000	0.1015	
* Calcium, Total	5/16/22 02:10	5/19/22 11:21		10.15	166	mg/L	0.70035	4.06	
* Iron, Total	5/16/22 02:10	5/19/22 10:32		1.015	0.919	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:32		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:32		1.015	36.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:32		1	9.89	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:32		1.015	4.62	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:32		1.015	17.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:54		1.015	0.935	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:47		10.15	172	mg/L	0.70035	4.06	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:54		1.015	0.915	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:54		1.015	36.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:54		1	10.3	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:54		1.015	4.80	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:54		1.015	18.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.00808	mg/L	0.006090	0.01015	J
* Arsenic, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.00221	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.0275	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:21		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.000216	mg/L	0.000068	0.000203	
* Chromium, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.000254	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.0136	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/16/22 13:33		5.075	2.46	mg/L	0.000761	0.001015	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:21		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:21		1.015	7.97	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 5/10/22 08:35
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09104

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:21		1.015	0.000129	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	0.00208	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	0.0255	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	0.000205	mg/L	0.000068	0.000203	
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	0.0124	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 17:22		5.075	2.54	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	7.34	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:28		1.015	0.000120	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:04	5/12/22 14:04		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/23/22 15:54	5/23/22 18:12		1	86.1	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	780	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	85.5	mg/L		1	A
Carbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	0.596	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 15:45	5/20/22 15:45		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 5/10/22 08:35
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09104

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:14	5/13/22 10:14		1	5.97	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:42	5/13/22 11:42		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:19	5/17/22 13:19		25	508	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/10/22 08:32	5/10/22 08:32			1031.77	uS/cm			FA
pH	5/10/22 08:32	5/10/22 08:32			5.77	SU			FA
Temperature	5/10/22 08:32	5/10/22 08:32			16.34	C			FA
Turbidity	5/10/22 08:32	5/10/22 08:32			1.67	NTU			FA
Sulfide	5/10/22 08:32	5/10/22 08:32			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BC09104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BC09104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BC09104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BC09104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09109	Alkalinity, Total as CaCO3	mg/L					65.6	50.7	45.0 to 55.0			5.63	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1 Dup

Location Code: WMWGADAP
Collected: 5/10/22 08:35
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09105

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:34		1.015	0.943	mg/L	0.030000	0.1015	
* Calcium, Total	5/16/22 02:10	5/19/22 11:24		10.15	164	mg/L	0.70035	4.06	
* Iron, Total	5/16/22 02:10	5/19/22 10:34		1.015	0.930	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:34		1.015	36.0	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:34		1	9.78	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:34		1.015	4.57	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:34		1.015	16.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 10:57		1.015	0.939	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:50		10.15	172	mg/L	0.70035	4.06	
* Iron, Dissolved	5/16/22 13:48	5/19/22 10:57		1.015	0.910	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 10:57		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 10:57		1.015	36.4	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 10:57		1	10.3	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 10:57		1.015	4.81	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 10:57		1.015	18.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.00686	mg/L	0.006090	0.01015	J
* Arsenic, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.00202	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.0284	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:24		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.000217	mg/L	0.000068	0.000203	
* Chromium, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.000249	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.0137	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/16/22 13:36		5.075	2.49	mg/L	0.000761	0.001015	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:24		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:24		1.015	8.07	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1 Dup

Location Code: WMWGADAP
Collected: 5/10/22 08:35
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09105

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:24		1.015	0.000141	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	0.00202	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	0.0255	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	0.000228	mg/L	0.000068	0.000203	
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	0.000249	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	0.0126	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 17:26		5.075	2.53	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	7.52	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:31		1.015	0.000128	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:12		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:06	5/12/22 14:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/23/22 15:54	5/23/22 18:12		1	80.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	786	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	80.1	mg/L		1	A
Carbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	Not Detected	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 16:07	5/20/22 16:07		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1 Dup

Location Code: WMWGADAP
Collected: 5/10/22 08:35
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09105

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:15	5/13/22 10:15		1	5.94	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:43	5/13/22 11:43		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:21	5/17/22 13:21		25	508	mg/L	15.0	50	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/10/22 08:32	5/10/22 08:32			1031.77	uS/cm			FA
pH	5/10/22 08:32	5/10/22 08:32			5.77	SU			FA
Temperature	5/10/22 08:32	5/10/22 08:32			16.34	C			FA
Turbidity	5/10/22 08:32	5/10/22 08:32			1.67	NTU			FA
Sulfide	5/10/22 08:32	5/10/22 08:32			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1 Dup

Laboratory ID Number: BC09105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1 Dup

Laboratory ID Number: BC09105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1 Dup

Laboratory ID Number: BC09105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 08:35
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-1 Dup

Laboratory ID Number: BC09105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09109	Alkalinity, Total as CaCO3	mg/L					65.6	50.7	45.0 to 55.0			5.63	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 5/10/22 09:53
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09106

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:37		1.015	0.0883	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 10:37		1.015	12.4	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:37		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/16/22 02:10	5/19/22 10:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:37		1.015	5.32	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:37		1	7.53	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:37		1.015	3.52	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:37		1.015	6.06	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	0.0833	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	12.6	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	5.18	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 11:01		1	7.73	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	3.61	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:01		1.015	5.92	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.0251	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.000154	mg/L	0.000081	0.000203	J
* Barium, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.0361	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:28		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.000250	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.000302	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.0143	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:28		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:28		1.015	1.05	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 5/10/22 09:53
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09106

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:28		1.015	0.00125	mg/L	0.000508	0.001015	
* Thallium, Total	5/13/22 10:35	5/13/22 17:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.0160	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.0331	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.000231	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.000268	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.000126	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.0145	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.991	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	0.000919	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:16		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:08	5/12/22 14:08		1	1.79	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/23/22 15:54	5/23/22 18:12		1	4.60	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	90.0	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	4.59	mg/L			
Carbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	0.00412	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 16:28	5/20/22 16:28		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 5/10/22 09:53
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09106

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:17	5/13/22 10:17		1	6.38	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:44	5/13/22 11:44		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:33	5/17/22 13:33		2	42.1	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/10/22 09:48	5/10/22 09:48			148.54	uS/cm			FA
pH	5/10/22 09:48	5/10/22 09:48			4.87	SU			FA
Temperature	5/10/22 09:48	5/10/22 09:48			15.87	C			FA
Turbidity	5/10/22 09:48	5/10/22 09:48			0.67	NTU			FA
Sulfide	5/10/22 09:48	5/10/22 09:48			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:53
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BC09106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:53
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BC09106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:53
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BC09106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 09:53
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BC09106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09109	Alkalinity, Total as CaCO3	mg/L					65.6	50.7	45.0 to 55.0			5.63	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 5/10/22 11:05
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09107

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:40		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/16/22 02:10	5/19/22 10:40		1.015	2.87	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:40		1.015	0.0306	mg/L	0.008120	0.0406	J
* Lithium, Total	5/16/22 02:10	5/19/22 10:40		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:40		1.015	1.12	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:40		1	15.0	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:40		1.015	6.99	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:40		1.015	3.87	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	2.98	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	1.12	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 11:04		1	15.6	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	7.29	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:04		1.015	3.72	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:31		1.015	0.0273	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 17:31		1.015	0.0497	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 17:31		1.015	0.000368	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:31		1.015	0.000150	mg/L	0.000068	0.000203	J
* Lead, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/13/22 17:31		1.015	0.0149	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:31		1.015	0.560	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 5/10/22 11:05
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09107

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:31		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	0.0470	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	0.000383	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	0.00523	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	0.543	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:20		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:09	5/12/22 14:09		1	1.05	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/23/22 15:54	5/23/22 18:12		1	12.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	33.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	12.4	mg/L			
Carbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 16:43	5/20/22 16:43		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 5/10/22 11:05
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09107

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:18	5/13/22 10:18		1	4.12	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:45	5/13/22 11:45		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:10	5/17/22 13:10		1	1.02	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/10/22 11:02	5/10/22 11:02			44.27	uS/cm			FA
pH	5/10/22 11:02	5/10/22 11:02			5.38	SU			FA
Temperature	5/10/22 11:02	5/10/22 11:02			16.28	C			FA
Turbidity	5/10/22 11:02	5/10/22 11:02			2.49	NTU			FA
Sulfide	5/10/22 11:02	5/10/22 11:02			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 11:05
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BC09107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 11:05
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BC09107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 11:05
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BC09107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 11:05
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BC09107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09109	Alkalinity, Total as CaCO3	mg/L					65.6	50.7	45.0 to 55.0			5.63	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 5/10/22 12:18
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09108

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:43		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/16/22 02:10	5/19/22 10:43		1.015	3.24	mg/L	0.070035	0.406	
* Iron, Total	5/16/22 02:10	5/19/22 10:43		1.015	0.0428	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:43		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:43		1.015	1.09	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:43		1	12.5	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:43		1.015	5.84	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:43		1.015	3.85	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	3.22	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	1.02	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 11:08		1	13.0	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	6.07	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:08		1.015	3.75	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.0716	mg/L	0.006090	0.01015	
* Arsenic, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.0309	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.000370	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.000121	mg/L	0.000068	0.000203	J
* Lead, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.000118	mg/L	0.000068	0.000203	J
* Manganese, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.00255	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:35		1.015	0.428	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 5/10/22 12:18
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09108

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	0.0283	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	0.000071	mg/L	0.000068	0.000203	J
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	0.0000969	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	0.00172	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	0.400	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:24		1	0.00286	mg/L	0.0003	0.0005	
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:10	5/12/22 14:10		1	1.15	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/23/22 15:54	5/23/22 18:12		1	14.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	33.3	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	14.7	mg/L			
Carbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 17:01	5/20/22 17:01		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 5/10/22 12:18
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09108

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:19	5/13/22 10:19		1	3.68	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:46	5/13/22 11:46		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:23	5/17/22 13:23		1	1.28	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/10/22 12:14	5/10/22 12:14			45.12	uS/cm			FA
pH	5/10/22 12:14	5/10/22 12:14			5.57	SU			FA
Temperature	5/10/22 12:14	5/10/22 12:14			16.91	C			FA
Turbidity	5/10/22 12:14	5/10/22 12:14			4.78	NTU			FA
Sulfide	5/10/22 12:14	5/10/22 12:14			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:18
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BC09108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:18
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BC09108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:18
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BC09108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 12:18
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BC09108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09109	Alkalinity, Total as CaCO3	mg/L					65.6	50.7	45.0 to 55.0			5.63	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 5/10/22 13:25
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09109

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:46		1.015	0.998	mg/L	0.030000	0.1015	
* Calcium, Total	5/16/22 02:10	5/19/22 11:27		10.15	58.5	mg/L	0.70035	4.06	
* Iron, Total	5/16/22 02:10	5/19/22 10:46		1.015	0.144	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:46		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:46		1.015	18.3	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:46		1	10.2	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:46		1.015	4.75	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:46		1.015	11.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 11:11		1.015	0.978	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:53		10.15	59.0	mg/L	0.70035	4.06	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:11		1.015	0.142	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 11:11		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 11:11		1.015	17.9	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 11:11		1	10.3	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 11:11		1.015	4.83	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:11		1.015	12.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:38		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 17:38		1.015	0.000162	mg/L	0.000081	0.000203	J
* Barium, Total	5/13/22 10:35	5/13/22 17:38		1.015	0.0287	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:38		1.015	0.000350	mg/L	0.000068	0.000203	
* Chromium, Total	5/13/22 10:35	5/13/22 17:38		1.015	0.000286	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:38		1.015	0.0147	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/16/22 13:40		92.365	25.0	mg/L	0.013855	0.018473	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:38		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/13/22 10:35	5/13/22 17:38		1.015	2.87	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 5/10/22 13:25
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09109

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:38		1.015	0.000113	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	0.000115	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	0.0267	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	0.000279	mg/L	0.000068	0.000203	
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	0.0134	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 17:29		92.365	25.3	mg/L	0.013855	0.018473	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	2.67	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:46		1.015	0.000114	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:28		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:11	5/12/22 14:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/23/22 15:54	5/23/22 18:12		1	69.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	362	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	68.8	mg/L			
Carbonate Alkalinity, (calc.)	5/23/22 15:54	5/23/22 18:12		1	0.514	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 17:20	5/20/22 17:20		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 5/10/22 13:25
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09109

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:20	5/13/22 10:20		1	4.59	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:48	5/13/22 11:48		1	0.0714	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:22	5/17/22 13:22		10	215	mg/L	6.0	20	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/10/22 13:21	5/10/22 13:21			551.26	uS/cm			FA
pH	5/10/22 13:21	5/10/22 13:21			5.95	SU			FA
Temperature	5/10/22 13:21	5/10/22 13:21			19.09	C			FA
Turbidity	5/10/22 13:21	5/10/22 13:21			0.23	NTU			FA
Sulfide	5/10/22 13:21	5/10/22 13:21			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:25
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BC09109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:25
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BC09109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:25
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BC09109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/10/22 13:25
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BC09109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09109	Alkalinity, Total as CaCO3	mg/L					65.6	50.7	45.0 to 55.0			5.63	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 5/11/22 08:40
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09110

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:49		1.015	0.0370	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 11:30		10.15	61.9	mg/L	0.70035	4.06	
* Iron, Total	5/16/22 02:10	5/19/22 11:30		10.15	5.20	mg/L	0.08120	0.406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:49		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:49		1.015	7.24	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:49		1	22.5	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:49		1.015	10.5	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:49		1.015	10.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 11:14		1.015	0.0374	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:57		10.15	57.8	mg/L	0.70035	4.06	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:57		10.15	4.43	mg/L	0.08120	0.406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 11:14		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 11:14		1.015	7.32	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 11:14		1	22.7	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 11:14		1.015	10.6	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:14		1.015	10.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:42		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.00323	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.320	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:42		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.0000728	mg/L	0.000068	0.000203	J
* Chromium, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.000217	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.00461	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/16/22 13:44		5.075	1.71	mg/L	0.000761	0.001015	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.000403	mg/L	0.000102	0.000203	
* Potassium, Total	5/13/22 10:35	5/13/22 17:42		1.015	0.469	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 5/11/22 08:40
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09110

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:42		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:42		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	0.00265	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	0.276	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	0.000243	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	0.00534	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 17:33		5.075	2.00	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	0.000381	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	0.443	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:50		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:12	5/12/22 14:12		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	194	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	216	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	191	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	3.34	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 17:41	5/20/22 17:41		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 5/11/22 08:40
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09110

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:21	5/13/22 10:21		1	5.13	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:49	5/13/22 11:49		1	0.0695	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:13	5/17/22 13:13		1	11.8	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/11/22 08:36	5/11/22 08:36			360.82	uS/cm			FA
pH	5/11/22 08:36	5/11/22 08:36			6.25	SU			FA
Temperature	5/11/22 08:36	5/11/22 08:36			17.86	C			FA
Turbidity	5/11/22 08:36	5/11/22 08:36			1.71	NTU			FA
Sulfide	5/11/22 08:36	5/11/22 08:36			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 08:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BC09110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 08:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BC09110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 08:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BC09110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/11/22 08:40
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BC09110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 5/11/22 10:12
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/16/22 02:10	5/19/22 10:52		1.015	0.0636	mg/L	0.030000	0.1015	J
* Calcium, Total	5/16/22 02:10	5/19/22 10:52		1.015	36.9	mg/L	0.070035	0.406	RA
* Iron, Total	5/16/22 02:10	5/19/22 10:52		1.015	0.977	mg/L	0.008120	0.0406	
* Lithium, Total	5/16/22 02:10	5/19/22 10:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/16/22 02:10	5/19/22 10:52		1.015	7.36	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/16/22 02:10	5/19/22 10:52		1	21.0	mg/L			
Silicon, Total	5/16/22 02:10	5/19/22 10:52		1.015	9.83	mg/L	0.02030	0.25375	
* Sodium, Total	5/16/22 02:10	5/19/22 10:52		1.015	13.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	0.0544	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	38.3	mg/L	0.070035	0.406	
* Iron, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	0.985	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	7.27	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/16/22 13:48	5/19/22 11:18		1	21.8	mg/L			
Silicon, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	10.2	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/16/22 13:48	5/19/22 11:18		1.015	14.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/13/22 10:35	5/13/22 17:46		1.015	0.000555	mg/L	0.000081	0.000203	
* Barium, Total	5/13/22 10:35	5/13/22 17:46		1.015	0.160	mg/L	0.000508	0.001015	
* Beryllium, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/13/22 10:35	5/13/22 17:46		1.015	0.000210	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/13/22 10:35	5/13/22 17:46		1.015	0.000908	mg/L	0.000068	0.000203	
* Lead, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/13/22 10:35	5/16/22 13:47		5.075	1.48	mg/L	0.000761	0.001015	
* Molybdenum, Total	5/13/22 10:35	5/13/22 17:46		1.015	0.000236	mg/L	0.000102	0.000203	
* Potassium, Total	5/13/22 10:35	5/13/22 17:46		1.015	1.89	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 5/11/22 10:12
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/13/22 10:35	5/13/22 17:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	0.000589	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	0.150	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	0.000260	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	0.000770	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/16/22 14:09	5/16/22 17:37		5.075	1.50	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	0.000216	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	1.75	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/16/22 14:09	5/16/22 16:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	5/19/22 13:03	5/19/22 18:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/12/22 14:13	5/12/22 14:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	133	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/12/20 11:17	5/17/22 11:10		1	181	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	133	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 18:04	5/20/22 18:04		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 5/11/22 10:12
Customer ID:
Submittal Date: 5/11/22 12:37

Laboratory ID Number: BC09111

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/13/22 10:23	5/13/22 10:23		1	7.20	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/13/22 11:50	5/13/22 11:50		1	0.108	mg/L	0.06	0.125	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	5/17/22 13:15	5/17/22 13:15		1	17.7	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/11/22 10:09	5/11/22 10:09			284.32	uS/cm			FA
pH	5/11/22 10:09	5/11/22 10:09			6.70	SU			FA
Temperature	5/11/22 10:09	5/11/22 10:09			18.32	C			FA
Turbidity	5/11/22 10:09	5/11/22 10:09			1	NTU			FA
Sulfide	5/11/22 10:09	5/11/22 10:09			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 10:12
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BC09111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Aluminum, Dissolved	mg/L	0.000189	0.010	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09111	Aluminum, Total	mg/L	0.000769	0.010	0.100	0.109	0.107	0.106	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Antimony, Dissolved	mg/L	0.000281	0.00100	0.100	0.0914	0.0966	0.0899	0.0850 to 0.115	91.4	70.0 to 130	5.53	20.0
BC09111	Antimony, Total	mg/L	0.000361	0.00100	0.100	0.108	0.106	0.0949	0.0850 to 0.115	108	70.0 to 130	1.87	20.0
BC09111	Arsenic, Dissolved	mg/L	0.0000207	0.000176	0.100	0.0987	0.0995	0.101	0.0850 to 0.115	98.1	70.0 to 130	0.807	20.0
BC09111	Arsenic, Total	mg/L	0.0000133	0.000176	0.100	0.105	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09111	Barium, Dissolved	mg/L	-0.0000097	0.00100	0.100	0.244	0.249	0.0948	0.0850 to 0.115	94.0	70.0 to 130	2.03	20.0
BC09111	Barium, Total	mg/L	-0.000001	0.00100	0.100	0.263	0.262	0.100	0.0850 to 0.115	103	70.0 to 130	0.381	20.0
BC09111	Beryllium, Dissolved	mg/L	0.000102	0.000880	0.100	0.0929	0.0943	0.0962	0.0850 to 0.115	92.9	70.0 to 130	1.50	20.0
BC09111	Beryllium, Total	mg/L	0.0000024	0.000880	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09111	Boron, Dissolved	mg/L	-0.00475	0.0650	1.00	1.06	1.06	0.988	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BC09111	Boron, Total	mg/L	-0.000197	0.0650	1.00	1.10	1.09	1.02	0.850 to 1.15	104	70.0 to 130	0.913	20.0
BC09111	Cadmium, Dissolved	mg/L	0.000	0.000147	0.100	0.0980	0.100	0.0998	0.0850 to 0.115	98.0	70.0 to 130	2.02	20.0
BC09111	Cadmium, Total	mg/L	0.0000064	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09111	Calcium, Dissolved	mg/L	0.00112	0.152	5.00	42.7	42.0	5.05	4.25 to 5.75	88.0	70.0 to 130	1.65	20.0
BC09111	Calcium, Total	mg/L	0.0100	0.152	5.00	44.5	43.0	4.90	4.25 to 5.75	152	70.0 to 130	3.43	20.0
BC09111	Chloride	mg/L	-0.025	1.00	10.0	17.3	17.3	10.0	9.00 to 11.0	101	80.0 to 120	0.00	20.0
BC09111	Chromium, Dissolved	mg/L	0.0000288	0.000440	0.100	0.0984	0.0962	0.0985	0.0850 to 0.115	98.1	70.0 to 130	2.26	20.0
BC09111	Chromium, Total	mg/L	-0.0000587	0.000440	0.100	0.106	0.103	0.105	0.0850 to 0.115	106	70.0 to 130	2.87	20.0
BC09111	Cobalt, Dissolved	mg/L	0.0000012	0.000147	0.100	0.101	0.0986	0.101	0.0850 to 0.115	100	70.0 to 130	2.40	20.0
BC09111	Cobalt, Total	mg/L	0.0000018	0.000147	0.100	0.110	0.108	0.109	0.0850 to 0.115	109	70.0 to 130	1.83	20.0
BC09111	Fluoride	mg/L	0.029	0.125	2.50	2.67	2.66	2.54	2.25 to 2.75	102	80.0 to 120	0.375	20.0
BC09111	Iron, Dissolved	mg/L	0.000535	0.0176	0.2	1.19	1.17	0.200	0.170 to 0.230	102	70.0 to 130	1.69	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 10:12
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BC09111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Iron, Total	mg/L	0.000304	0.0176	0.2	1.17	1.17	0.205	0.170 to 0.230	96.5	70.0 to 130	0.00	20.0
BC09111	Lead, Dissolved	mg/L	0.00001	0.000147	0.100	0.0988	0.100	0.101	0.0850 to 0.115	98.8	70.0 to 130	1.21	20.0
BC09111	Lead, Total	mg/L	0.0000066	0.000147	0.100	0.109	0.107	0.107	0.0850 to 0.115	109	70.0 to 130	1.85	20.0
BC09111	Lithium, Dissolved	mg/L	1.910E-05	0.0154	0.200	0.209	0.207	0.198	0.170 to 0.230	104	70.0 to 130	0.962	20.0
BC09111	Lithium, Total	mg/L	-0.000474	0.0154	0.200	0.201	0.204	0.206	0.170 to 0.230	100	70.0 to 130	1.48	20.0
BC09111	Magnesium, Dissolved	mg/L	-0.00621	0.0462	5.00	12.5	12.4	5.20	4.25 to 5.75	105	70.0 to 130	0.803	20.0
BC09111	Magnesium, Total	mg/L	0.00217	0.0462	5.00	12.5	12.5	5.25	4.25 to 5.75	103	70.0 to 130	0.00	20.0
BC09111	Manganese, Dissolved	mg/L	-0.0000098	0.0002	0.100	1.57	1.61	0.102	0.0850 to 0.115	70.0	70.0 to 130	2.52	20.0
BC09111	Manganese, Total	mg/L	0.000193	0.0002	0.100	1.57	1.57	0.0973	0.0850 to 0.115	90.0	70.0 to 130	0.00	20.0
BC09111	Mercury, Total by CVAA	mg/L	0.00015	0.000500	0.004	0.00408	0.00411	0.00397	0.00340 to 0.00460	102	70.0 to 130	0.733	20.0
BC09111	Molybdenum, Dissolved	mg/L	0.0000145	0.0002	0.100	0.0981	0.0986	0.0983	0.0850 to 0.115	97.9	70.0 to 130	0.508	20.0
BC09111	Molybdenum, Total	mg/L	0.0000099	0.0002	0.100	0.107	0.105	0.102	0.0850 to 0.115	107	70.0 to 130	1.89	20.0
BC09111	Potassium, Dissolved	mg/L	0.0130	0.367	10.0	11.7	11.4	9.85	8.50 to 11.5	99.5	70.0 to 130	2.60	20.0
BC09111	Potassium, Total	mg/L	-0.0174	0.367	10.0	12.4	12.4	10.8	8.50 to 11.5	105	70.0 to 130	0.00	20.0
BC09111	Selenium, Dissolved	mg/L	0.000104	0.00100	0.100	0.101	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	0.00	20.0
BC09111	Selenium, Total	mg/L	0.0000909	0.00100	0.100	0.106	0.104	0.103	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09111	Silicon, Dissolved	mg/L	-0.00274	0.0440	1.00	11.2	11.1	1.02	0.850 to 1.15	100	70.0 to 130	0.897	20.0
BC09111	Silicon, Total	mg/L	0.000398	0.0440	1.00	10.9	10.9	1.02	0.850 to 1.15	107	70.0 to 130	0.00	20.0
BC09111	Sodium, Dissolved	mg/L	-0.000198	0.0660	5.00	19.8	19.7	4.99	4.25 to 5.75	114	70.0 to 130	0.506	20.0
BC09111	Sodium, Total	mg/L	0.00237	0.0660	5.00	18.5	18.8	5.23	4.25 to 5.75	96.0	70.0 to 130	1.61	20.0
BC09111	Sulfate	mg/L	-0.451	2.0	20.0	36.8	36.9	19.7	18.0 to 22.0	95.5	80.0 to 120	0.271	20.0
BC09111	Thallium, Dissolved	mg/L	0.000008	0.000147	0.100	0.101	0.101	0.101	0.0850 to 0.115	101	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/11/22 10:12
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BC09111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09111	Thallium, Total	mg/L	0.0000081	0.000147	0.100	0.115	0.109	0.110	0.0850 to 0.115	115	70.0 to 130	5.36	20.0
BC09111	Total Organic Carbon	mg/L	0.294	1.00	10.0	10.8	10.3	9.84		108	80.0 to 120	4.74	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/11/22 10:12
Customer ID:
Delivery Date: 5/11/22 12:37

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BC09111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09111	Nitrogen, Nitrate/Nitrite	mg/L as N	0.07	0.200	2.00	1.94	0.061	1.86	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09111	Solids, Dissolved	mg/L	1.00	25.0			176	50.0	40.0 to 60.0			2.80	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 5/16/22 12:05
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09611

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:09		1.015	0.381	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 12:00		10.15	58.2	mg/L	0.70035	4.06	
* Iron, Total	5/23/22 14:20	5/24/22 12:00		10.15	12.8	mg/L	0.08120	0.406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:09		1.015	0.0271	mg/L	0.007105	0.01999956	
* Magnesium, Total	5/23/22 14:20	5/24/22 10:09		1.015	7.71	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:09		1	9.80	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:09		1.015	4.58	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:09		1.015	3.54	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 10:48		1.015	0.395	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 11:57		10.15	59.8	mg/L	0.70035	4.06	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:57		10.15	12.3	mg/L	0.08120	0.406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 10:48		1.015	0.0290	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 10:48		1.015	7.88	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 10:48		1	10.2	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 10:48		1.015	4.75	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 10:48		1.015	3.70	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.105	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.569	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.0974	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.000342	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.0366	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 15:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/25/22 10:26		10.15	9.98	mg/L	0.001522	0.00203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.0201	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 15:12		1.015	7.36	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 5/16/22 12:05
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09611

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:12		1.015	0.000414	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	0.484	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	0.0932	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	0.000223	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	0.0352	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/25/22 10:11		10.15	10.0	mg/L	0.001522	0.00203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	0.0195	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	7.35	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 17:53		1.015	0.000396	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:09	5/19/22 16:09		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	119	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	253	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	117	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	1.46	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 19:33	5/20/22 19:33		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 5/16/22 12:05
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09611

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:00	5/20/22 09:00		1	2.14	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 13:55	5/20/22 13:55		1	0.264	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:16	6/7/22 09:16		5	84.3	mg/L	3.0	10	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/16/22 12:03	5/16/22 12:03			420.43	uS/cm			FA
pH	5/16/22 12:03	5/16/22 12:03			6.16	SU			FA
Temperature	5/16/22 12:03	5/16/22 12:03			17.67	C			FA
Turbidity	5/16/22 12:03	5/16/22 12:03			6.16	NTU			FA
Sulfide	5/16/22 12:03	5/16/22 12:03			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 12:05
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BC09611

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 12:05
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BC09611

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 12:05
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BC09611

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 12:05
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BC09611

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-3

Location Code: WMWGADAPFB
Collected: 5/16/22 14:40
Customer ID:
Submittal Date: 5/18/22 15:03

Laboratory ID Number: BC09612

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:12		1	Not Detected	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	5/23/22 14:20	5/24/22 10:12		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:15		1.015	0.000208	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 15:15		1.015	0.000199	mg/L	0.000152	0.000203	J
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:11	5/19/22 16:11		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-3

Location Code: WMWGADAPFB
Collected: 5/16/22 14:40
Customer ID:
Submittal Date: 5/18/22 15:03

Laboratory ID Number: BC09612

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	5/20/22 19:54	5/20/22 19:54		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/20/22 09:01	5/20/22 09:01		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/20/22 13:57	5/20/22 13:57		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/7/22 09:03	6/7/22 09:03		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
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Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 5/16/22 14:40
Customer ID:
Delivery Date: 5/18/22 15:03

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BC09612

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0

Comments:

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Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 5/16/22 14:40
Customer ID:
Delivery Date: 5/18/22 15:03

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BC09612

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 5/16/22 14:40
Customer ID:
Delivery Date: 5/18/22 15:03

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BC09612

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 5/16/22 14:45
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09613

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***					***Preparation Method: EPA 1638***			
* Boron, Total	5/23/22 14:20	5/24/22 10:15		1.015	0.342	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:15		1.015	30.7	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 12:03		20.3	52.2	mg/L	0.1624	0.812	
* Lithium, Total	5/23/22 14:20	5/24/22 10:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:15		1.015	9.90	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:15		1	8.86	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:15		1.015	4.14	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:15		1.015	14.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 10:52		1.015	0.374	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 10:52		1.015	31.6	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 12:01		20.3	50.6	mg/L	0.1624	0.812	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 10:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 10:52		1.015	10.1	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 10:52		1	9.29	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 10:52		1.015	4.34	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 10:52		1.015	15.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/20/22 09:54	5/20/22 15:19		1.015	0.0132	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 15:19		1.015	0.230	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:19		1.015	0.000227	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:19		1.015	0.0289	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/25/22 10:29		5.075	1.96	mg/L	0.000761	0.001015	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:19		1.015	0.00122	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 15:19		1.015	2.46	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 5/16/22 14:45
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09613

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	0.0121	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	0.223	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	0.000211	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	0.0279	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/25/22 10:15		5.075	1.94	mg/L	0.000761	0.001015	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	0.00132	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	2.47	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 17:57		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:13	5/19/22 16:13		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	102	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	190	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	101	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	1.19	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 20:10	5/20/22 20:10		1	1.50	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 5/16/22 14:45
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09613

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:02	5/20/22 09:02		1	8.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 13:58	5/20/22 13:58		1	0.247	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:18	6/7/22 09:18		2	51.8	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/16/22 14:42	5/16/22 14:42			443.50	uS/cm			FA
pH	5/16/22 14:42	5/16/22 14:42			6.61	SU			FA
Temperature	5/16/22 14:42	5/16/22 14:42			18.15	C			FA
Turbidity	5/16/22 14:42	5/16/22 14:42			5.4	NTU			FA
Sulfide	5/16/22 14:42	5/16/22 14:42			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:45
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BC09613

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:45
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BC09613

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:45
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BC09613

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:45
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BC09613

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 5/16/22 11:08
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09614

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:18		1.015	0.556	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:18		1.015	5.22	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:18		1.015	0.0985	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:18		1.015	0.0612	mg/L	0.007105	0.01999956	
* Magnesium, Total	5/23/22 14:20	5/24/22 10:18		1.015	1.28	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:18		1	8.77	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:18		1.015	4.10	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 12:06		10.15	130	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 10:55		1.015	0.566	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 10:55		1.015	5.47	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 10:55		1.015	0.0507	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 10:55		1.015	0.0701	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 10:55		1.015	1.35	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 10:55		1	9.44	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 10:55		1.015	4.41	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 12:04		10.15	138	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.0188	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.00135	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.132	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.000288	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.0150	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.00357	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 15:22		1.015	0.682	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 5/16/22 11:08
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09614

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.00753	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.00115	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.128	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.000221	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.0153	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.00357	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	0.714	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:00		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:14	5/19/22 16:14		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	301	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	293	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	293	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	8.30	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 20:30	5/20/22 20:30		1	1.03	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 5/16/22 11:08
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09614

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:03	5/20/22 09:03		1	6.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 13:59	5/20/22 13:59		1	2.40	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:06	6/7/22 09:06		1	1.15	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/16/22 11:05	5/16/22 11:05			511.85	uS/cm			FA
pH	5/16/22 11:05	5/16/22 11:05			8.10	SU			FA
Temperature	5/16/22 11:05	5/16/22 11:05			21.28	C			FA
Turbidity	5/16/22 11:05	5/16/22 11:05			0.64	NTU			FA
Sulfide	5/16/22 11:05	5/16/22 11:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:08
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BC09614

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:08
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BC09614

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:08
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BC09614

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:08
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BC09614

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 5/16/22 14:09
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09615

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:21		1.015	0.336	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:21		1.015	26.9	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:21		1.015	0.424	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:21		1.015	6.52	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:21		1	14.4	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:21		1.015	6.72	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:21		1.015	12.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	0.332	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	29.2	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	0.144	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	6.71	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 10:58		1	15.2	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	7.10	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 10:58		1.015	12.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.0295	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.000183	mg/L	0.000081	0.000203	J
* Barium, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.124	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.000151	mg/L	0.000068	0.000203	J
* Chromium, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.000277	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.00485	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.000151	mg/L	0.000068	0.000203	J
* Manganese, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.378	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:26		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 15:26		1.015	0.949	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 5/16/22 14:09
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09615

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	0.122	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	0.000180	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	0.00484	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	0.384	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	0.993	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:04		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:16	5/19/22 16:16		1	0.585	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	47.3	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	138	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	47.3	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	0.0213	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 20:52	5/20/22 20:52		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 5/16/22 14:09
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09615

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:05	5/20/22 09:05		1	7.23	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:00	5/20/22 14:00		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:19	6/7/22 09:19		2	60.2	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/16/22 14:06	5/16/22 14:06			237.82	uS/cm			FA
pH	5/16/22 14:06	5/16/22 14:06			5.24	SU			FA
Temperature	5/16/22 14:06	5/16/22 14:06			16.30	C			FA
Turbidity	5/16/22 14:06	5/16/22 14:06			4.65	NTU			FA
Sulfide	5/16/22 14:06	5/16/22 14:06			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BC09615

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BC09615

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BC09615

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BC09615

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H Dup

Location Code: WMWGADAP
Collected: 5/16/22 14:09
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09616

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:24		1.015	0.334	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:24		1.015	28.3	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:24		1.015	0.410	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:24		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:24		1.015	6.51	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:24		1	14.6	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:24		1.015	6.81	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:24		1.015	11.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	0.334	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	28.7	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	0.138	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	6.63	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:02		1	15.1	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	7.05	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 11:02		1.015	12.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.0284	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.000187	mg/L	0.000081	0.000203	J
* Barium, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.124	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.000135	mg/L	0.000068	0.000203	J
* Chromium, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.000265	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.00496	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.000134	mg/L	0.000068	0.000203	J
* Manganese, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.382	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:30		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 15:30		1.015	0.943	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H Dup

Location Code: WMWGADAP
Collected: 5/16/22 14:09
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09616

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	0.0000914	mg/L	0.000081	0.000203	J
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	0.119	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	0.000162	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	0.00480	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	0.374	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	0.961	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:08		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:18	5/19/22 16:18		1	0.574	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/24/22 13:40	5/24/22 15:50		1	53.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	107	mg/L		25	PA
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	52.9	mg/L			
Carbonate Alkalinity, (calc.)	5/24/22 13:40	5/24/22 15:50		1	0.414	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 21:10	5/20/22 21:10		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H Dup

Location Code: WMWGADAP
Collected: 5/16/22 14:09
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09616

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:06	5/20/22 09:06		1	7.10	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:01	5/20/22 14:01		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:20	6/7/22 09:20		2	59.1	mg/L	1.2	4	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/16/22 14:06	5/16/22 14:06			237.82	uS/cm			FA
pH	5/16/22 14:06	5/16/22 14:06			5.24	SU			FA
Temperature	5/16/22 14:06	5/16/22 14:06			16.30	C			FA
Turbidity	5/16/22 14:06	5/16/22 14:06			4.65	NTU			FA
Sulfide	5/16/22 14:06	5/16/22 14:06			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H Dup

Laboratory ID Number: BC09616

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H Dup

Laboratory ID Number: BC09616

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H Dup

Laboratory ID Number: BC09616

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:09
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-19H Dup

Laboratory ID Number: BC09616

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09616	Alkalinity, Total as CaCO3	mg/L					54.8	50.4	45.0 to 55.0			2.59	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 5/17/22 09:56
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09617

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:27		1.015	0.548	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:27		1.015	3.30	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:27		1.015	0.396	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:27		1.015	0.196	mg/L	0.007105	0.01999956	
* Magnesium, Total	5/23/22 14:20	5/24/22 10:27		1.015	1.18	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:27		1	9.57	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:27		1.015	4.47	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 12:09		20.3	392	mg/L	0.609	8.12	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:05		1.015	0.551	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 11:05		1.015	3.45	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:05		1.015	0.0412	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:05		1.015	0.215	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:05		1.015	1.11	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:05		1	8.54	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:05		1.015	3.99	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 12:07		10.15	391	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.000508	mg/L	0.000508	0.001015	J
* Aluminum, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.666	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.00140	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.435	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.00104	mg/L	0.000203	0.001015	
* Cobalt, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.000193	mg/L	0.000068	0.000203	J
* Lead, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.000216	mg/L	0.000068	0.000203	
* Manganese, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.00964	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:33		1.015	0.00194	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 15:33		1.015	1.21	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 5/17/22 09:56
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09617

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.000872	mg/L	0.000508	0.001015	J
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.00960	mg/L	0.006090	0.01015	J
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.00121	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.392	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.000224	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.00668	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	0.00194	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	1.11	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:11		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:20	5/19/22 16:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	635	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	921	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	610	mg/L		1	A
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	25.0	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 21:30	5/20/22 21:30		1	1.82	mg/L	1.00	2	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 5/17/22 09:56
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09617

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:13	5/20/22 09:13		10	188	mg/L	5.00	10	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:09	5/20/22 14:09		4	8.22	mg/L	0.24	0.5	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:09	6/7/22 09:09		1	19.1	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/17/22 09:53	5/17/22 09:53			1488.31	uS/cm			FA
pH	5/17/22 09:53	5/17/22 09:53			8.31	SU			FA
Temperature	5/17/22 09:53	5/17/22 09:53			18.49	C			FA
Turbidity	5/17/22 09:53	5/17/22 09:53			7.63	NTU			FA
Sulfide	5/17/22 09:53	5/17/22 09:53			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:56
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BC09617

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:56
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BC09617

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:56
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BC09617

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:56
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BC09617

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 5/17/22 11:58
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09618

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:30		1.015	0.632	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 12:11		10.15	74.7	mg/L	0.70035	4.06	
* Iron, Total	5/23/22 14:20	5/24/22 10:30		1.015	3.32	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:30		1.015	20.1	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:30		1	7.92	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:30		1.015	3.70	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:30		1.015	16.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:08		1.015	0.628	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 12:11		10.15	69.4	mg/L	0.70035	4.06	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:08		1.015	2.43	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:08		1.015	20.3	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:08		1	8.13	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:08		1.015	3.80	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 11:08		1.015	17.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.0115	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.00200	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.115	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 15:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.000215	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.0102	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 15:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/25/22 10:33		92.365	30.3	mg/L	0.013855	0.018473	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.000405	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 15:37		1.015	2.80	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 5/17/22 11:58
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09618

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 15:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:37		1.015	0.000132	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	0.00127	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	0.107	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	0.000242	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	0.0107	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/25/22 10:18		92.365	34.0	mg/L	0.013855	0.018473	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	0.000366	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	2.93	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:15		1.015	0.000131	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:22	5/19/22 16:22		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	163	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	401	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	161	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	1.59	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 21:49	5/20/22 21:49		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 5/17/22 11:58
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09618

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/20/22 09:08	5/20/22 09:08		1	6.22	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/20/22 14:04	5/20/22 14:04		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/7/22 09:21	6/7/22 09:21		10	187	mg/L	6.0	20	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	5/17/22 11:55	5/17/22 11:55			613.72	uS/cm			FA
pH	5/17/22 11:55	5/17/22 11:55			5.74	SU			FA
Temperature	5/17/22 11:55	5/17/22 11:55			17.29	C			FA
Turbidity	5/17/22 11:55	5/17/22 11:55			3.94	NTU			FA
Sulfide	5/17/22 11:55	5/17/22 11:55			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BC09618

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BC09618

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BC09618

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/17/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BC09618

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-1

Location Code: WMWGADAPEB
Collected: 5/17/22 12:30
Customer ID:
Submittal Date: 5/18/22 15:04

Laboratory ID Number: BC09619

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:33		1	Not Detected	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	5/23/22 14:20	5/24/22 10:33		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:40		1.015	0.000222	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 15:40		1.015	0.00126	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:24	5/19/22 16:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-1

Location Code: WMWGADAPEB
Collected: 5/17/22 12:30
Customer ID:
Submittal Date: 5/18/22 15:04

Laboratory ID Number: BC09619

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	5/20/22 22:10	5/20/22 22:10		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/20/22 09:09	5/20/22 09:09		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/20/22 14:05	5/20/22 14:05		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/7/22 09:12	6/7/22 09:12		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 5/17/22 12:30
Customer ID:
Delivery Date: 5/18/22 15:04

Description:Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BC09619

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09619	Chloride	mg/L	-0.209	1.00	10.0	10.1	10.2	10.6	9.00 to 11.0	101	80.0 to 120	0.985	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09619	Fluoride	mg/L	-0.0497	0.125	2.50	2.69	2.60	2.61	2.25 to 2.75	108	80.0 to 120	3.40	20.0
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 5/17/22 12:30
Customer ID:
Delivery Date: 5/18/22 15:04

Description:Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BC09619

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPEB
Sample Date: 5/17/22 12:30
Customer ID:
Delivery Date: 5/18/22 15:04

Description: Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BC09619

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-2

Location Code: WMWGADAPEB
Collected: 5/17/22 12:45
Customer ID:
Submittal Date: 5/18/22 15:04

Laboratory ID Number: BC09620

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:36		1	Not Detected	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	5/23/22 14:20	5/24/22 10:36		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 15:44		1.015	0.000346	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 15:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 10:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:26	5/19/22 16:26		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-2

Location Code: WMWGADAPEB
Collected: 5/17/22 12:45
Customer ID:
Submittal Date: 5/18/22 15:04

Laboratory ID Number: BC09620

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	5/20/22 22:32	5/20/22 22:32		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/20/22 09:23	5/20/22 09:23		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/20/22 14:19	5/20/22 14:19		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/7/22 09:13	6/7/22 09:13		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 5/17/22 12:45
Customer ID:
Delivery Date: 5/18/22 15:04

Description:Gadsden Ash Pond Equipment Blank-2

Laboratory ID Number: BC09620

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.103	0.101	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BC09620	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0928	0.0936	0.0921	0.0850 to 0.115	92.8	70.0 to 130	0.858	20.0
BC09620	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.101	0.102	0.101	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09620	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.102	0.101	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BC09620	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BC09620	Boron, Total	mg/L	0.000001	0.0650	1.00	0.985	0.978	0.962	0.850 to 1.15	98.5	70.0 to 130	0.713	20.0
BC09620	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.0983	0.0976	0.0976	0.0850 to 0.115	98.3	70.0 to 130	0.715	20.0
BC09620	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.84	4.93	5.02	4.25 to 5.75	96.8	70.0 to 130	1.84	20.0
BC09625	Chloride	mg/L	-0.142	1.00	10.0	10.5	10.3	10.6	9.00 to 11.0	105	80.0 to 120	1.92	20.0
BC09620	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0973	0.0967	0.0948	0.0850 to 0.115	97.3	70.0 to 130	0.619	20.0
BC09620	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.102	0.101	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BC09625	Fluoride	mg/L	-0.0584	0.125	2.50	2.53	2.53	2.46	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC09620	Iron, Total	mg/L	0.000091	0.0176	0.2	0.200	0.199	0.194	0.170 to 0.230	100	70.0 to 130	0.501	20.0
BC09620	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.104	0.107	0.104	0.0850 to 0.115	104	70.0 to 130	2.84	20.0
BC09620	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.206	0.200	0.202	0.170 to 0.230	103	70.0 to 130	2.96	20.0
BC09620	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.14	5.07	5.14	4.25 to 5.75	103	70.0 to 130	1.37	20.0
BC09620	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.105	0.103	0.102	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BC09620	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00354	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	2.79	20.0
BC09620	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.103	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BC09620	Potassium, Total	mg/L	0.00593	0.367	10.0	10.3	10.2	10.4	8.50 to 11.5	103	70.0 to 130	0.976	20.0
BC09620	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.103	0.105	0.105	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BC09620	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.995	0.994	0.998	0.850 to 1.15	99.5	70.0 to 130	0.101	20.0
BC09620	Sodium, Total	mg/L	0.00163	0.0660	5.00	5.12	4.99	5.03	4.25 to 5.75	102	70.0 to 130	2.57	20.0

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 5/17/22 12:45
Customer ID:
Delivery Date: 5/18/22 15:04

Description:Gadsden Ash Pond Equipment Blank-2

Laboratory ID Number: BC09620

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Sulfate	mg/L	-0.293	2.0	20.0	20.0	20.9	18.8	18.0 to 22.0	100	80.0 to 120	4.40	20.0
BC09620	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.105	0.107	0.106	0.0850 to 0.115	105	70.0 to 130	1.89	20.0
BC09620	Total Organic Carbon	mg/L	0.299	1.00	10.0	10.5	10.0	9.92		105	80.0 to 120	4.88	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPEB
Sample Date: 5/17/22 12:45
Customer ID:
Delivery Date: 5/18/22 15:04

Description: Gadsden Ash Pond Equipment Blank-2

Laboratory ID Number: BC09620

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09620	Nitrogen, Nitrate/Nitrite	mg/L as N	0.02	0.200	2.00	1.94	0.028	1.88	1.80 to 2.20	97.0	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 5/16/22 11:58
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09621

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:50		1.015	0.622	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:50		1.015	3.81	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:50		1.015	0.0678	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:50		1.015	0.111	mg/L	0.007105	0.01999956	
* Magnesium, Total	5/23/22 14:20	5/24/22 10:50		1.015	1.29	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:50		1	9.18	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:50		1.015	4.29	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 12:14		10.15	224	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:12		1.015	0.622	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 11:12		1.015	4.09	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:12		1.015	0.0270	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:12		1.015	0.121	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:12		1.015	1.37	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:12		1	9.74	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:12		1.015	4.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 12:14		10.15	236	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 16:05		1.015	0.0755	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 16:05		1.015	0.000393	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 16:05		1.015	0.322	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 16:05		1.015	0.000264	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 16:05		1.015	0.0253	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 16:05		1.015	0.000955	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 16:05		1.015	1.07	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 5/16/22 11:58
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09621

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 16:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	0.0178	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	0.000444	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	0.311	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	0.000262	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	0.0255	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	0.00105	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	1.12	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:19		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 11:00		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/23/22 13:53	5/23/22 13:53		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	447	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	462	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	423	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	23.4	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/20/22 23:59	5/20/22 23:59		1	2.40	mg/L	1.00	2	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 5/16/22 11:58
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09621

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:33	5/20/22 09:33		4	43.4	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:29	5/20/22 14:29		2	6.12	mg/L	0.12	0.25	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:33	6/7/22 09:33		1	10.0	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/16/22 11:55	5/16/22 11:55			905.13	uS/cm			FA
pH	5/16/22 11:55	5/16/22 11:55			8.48	SU			FA
Temperature	5/16/22 11:55	5/16/22 11:55			20.60	C			FA
Turbidity	5/16/22 11:55	5/16/22 11:55			1.22	NTU			FA
Sulfide	5/16/22 11:55	5/16/22 11:55			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BC09621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09625	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09625	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0923	0.0920	0.0921	0.0850 to 0.115	92.3	70.0 to 130	0.326	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09625	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09625	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09625	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09625	Boron, Total	mg/L	0.000001	0.0650	1.00	0.972	0.989	0.962	0.850 to 1.15	97.2	70.0 to 130	1.73	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09625	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.100	0.0998	0.0976	0.0850 to 0.115	100	70.0 to 130	0.200	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09625	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.91	4.95	5.02	4.25 to 5.75	98.2	70.0 to 130	0.811	20.0
BC09625	Chloride	mg/L	-0.142	1.00	10.0	10.5	10.3	10.6	9.00 to 11.0	105	80.0 to 120	1.92	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09625	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0982	0.0975	0.0948	0.0850 to 0.115	98.2	70.0 to 130	0.715	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09625	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09625	Fluoride	mg/L	-0.0584	0.125	2.50	2.53	2.53	2.46	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BC09621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Iron, Total	mg/L	0.000091	0.0176	0.2	0.197	0.197	0.194	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09625	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09625	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.197	0.199	0.202	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09625	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.05	5.12	5.14	4.25 to 5.75	101	70.0 to 130	1.38	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09625	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.104	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09625	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00361	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	0.828	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09625	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09625	Potassium, Total	mg/L	0.00593	0.367	10.0	10.2	10.4	10.4	8.50 to 11.5	102	70.0 to 130	1.94	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09625	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09625	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.989	0.993	0.998	0.850 to 1.15	98.9	70.0 to 130	0.404	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09625	Sodium, Total	mg/L	0.00163	0.0660	5.00	4.94	4.98	5.03	4.25 to 5.75	98.8	70.0 to 130	0.806	20.0
BC09625	Sulfate	mg/L	-0.310	2.0	20.0	20.1	19.9	18.6	18.0 to 22.0	100	80.0 to 120	1.00	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BC09621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09625	Total Organic Carbon	mg/L	0.290	1.00	10.0	10.3	10.2	9.65		103	80.0 to 120	0.976	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:58
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BC09621

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09625	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.20	0.060	1.94	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09616	Solids, Dissolved	mg/L	1.00	25.0			129	49.0	40.0 to 60.0			18.6	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 5/17/22 06:50
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09622

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:53		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/23/22 14:20	5/24/22 10:53		1.015	19.7	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:53		1.015	0.0215	mg/L	0.008120	0.0406	J
* Lithium, Total	5/23/22 14:20	5/24/22 10:53		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:53		1.015	7.78	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:53		1	8.69	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:53		1.015	4.06	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:53		1.015	3.04	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	21.1	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	8.24	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:15		1	9.27	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	4.33	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 11:15		1.015	3.12	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 16:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/25/22 10:36		92.365	15.6	mg/L	0.554190	0.92365	
* Arsenic, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.00457	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.0288	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.000606	mg/L	0.000406	0.001015	J
* Cadmium, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.00108	mg/L	0.000068	0.000203	
* Chromium, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.000589	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.0563	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.00178	mg/L	0.000068	0.000203	
* Manganese, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.646	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 16:09		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.350	mg/L	0.169505	0.5075	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 5/17/22 06:50
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09622

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 16:09		1.015	0.00609	mg/L	0.000508	0.001015	
* Thallium, Total	5/20/22 09:54	5/20/22 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/25/22 10:22		92.365	14.2	mg/L	0.554190	0.92365	
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.00542	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.0280	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.000775	mg/L	0.000406	0.001015	J
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.00113	mg/L	0.000068	0.000203	
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.000433	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.0551	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.00209	mg/L	0.000068	0.000203	
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.640	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.337	mg/L	0.169505	0.5075	J
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	0.00936	mg/L	0.000508	0.001015	
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:22		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 11:03		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/23/22 13:54	5/23/22 13:54		1	0.844	mg/L as N	0.20	0.3	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	226	mg/L		25	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 00:22	5/21/22 00:22		1	1.03	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:26	5/20/22 09:26		1	3.58	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:21	5/20/22 14:21		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:56	6/7/22 09:56		10	139	mg/L	6.0	20	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 5/17/22 06:50
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09622

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/17/22 06:46	5/17/22 06:46			360.05	uS/cm			FA
pH	5/17/22 06:46	5/17/22 06:46			4.34	SU			FA
Temperature	5/17/22 06:46	5/17/22 06:46			18.47	C			FA
Turbidity	5/17/22 06:46	5/17/22 06:46			2.68	NTU			FA
Sulfide	5/17/22 06:46	5/17/22 06:46			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 06:50
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BC09622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09625	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09625	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0923	0.0920	0.0921	0.0850 to 0.115	92.3	70.0 to 130	0.326	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09625	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09625	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09625	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09625	Boron, Total	mg/L	0.000001	0.0650	1.00	0.972	0.989	0.962	0.850 to 1.15	97.2	70.0 to 130	1.73	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09625	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.100	0.0998	0.0976	0.0850 to 0.115	100	70.0 to 130	0.200	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09625	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.91	4.95	5.02	4.25 to 5.75	98.2	70.0 to 130	0.811	20.0
BC09625	Chloride	mg/L	-0.142	1.00	10.0	10.5	10.3	10.6	9.00 to 11.0	105	80.0 to 120	1.92	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09625	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0982	0.0975	0.0948	0.0850 to 0.115	98.2	70.0 to 130	0.715	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09625	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09625	Fluoride	mg/L	-0.0584	0.125	2.50	2.53	2.53	2.46	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 06:50
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BC09622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Iron, Total	mg/L	0.000091	0.0176	0.2	0.197	0.197	0.194	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09625	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09625	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.197	0.199	0.202	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09625	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.05	5.12	5.14	4.25 to 5.75	101	70.0 to 130	1.38	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09625	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.104	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09625	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00361	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	0.828	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09625	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09625	Potassium, Total	mg/L	0.00593	0.367	10.0	10.2	10.4	10.4	8.50 to 11.5	102	70.0 to 130	1.94	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09625	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09625	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.989	0.993	0.998	0.850 to 1.15	98.9	70.0 to 130	0.404	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09625	Sodium, Total	mg/L	0.00163	0.0660	5.00	4.94	4.98	5.03	4.25 to 5.75	98.8	70.0 to 130	0.806	20.0
BC09625	Sulfate	mg/L	-0.310	2.0	20.0	20.1	19.9	18.6	18.0 to 22.0	100	80.0 to 120	1.00	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 06:50
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BC09622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09625	Total Organic Carbon	mg/L	0.290	1.00	10.0	10.3	10.2	9.65		103	80.0 to 120	0.976	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/17/22 06:50
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BC09622

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.20	0.060	1.94	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Alkalinity could not be performed, pH below titration end point of 4.5 SU.
Fluoride may have potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 5/17/22 08:15
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09623

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:56		1.015	0.139	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 12:17		10.15	80.6	mg/L	0.70035	4.06	
* Iron, Total	5/23/22 14:20	5/24/22 12:17		10.15	13.3	mg/L	0.08120	0.406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:56		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 10:56		1.015	12.5	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:56		1	25.0	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:56		1.015	11.7	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 10:56		1.015	12.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:19		1.015	0.145	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 12:17		10.15	83.9	mg/L	0.70035	4.06	
* Iron, Dissolved	5/23/22 13:00	5/24/22 12:17		10.15	13.4	mg/L	0.08120	0.406	RA
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:19		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:19		1.015	12.8	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:19		1	26.3	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:19		1.015	12.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 11:19		1.015	13.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 16:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 16:12		1.015	0.0333	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 16:12		1.015	0.00281	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 16:12		1.015	0.195	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 16:12		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 16:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 16:12		1.015	0.000385	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 16:12		1.015	0.000440	mg/L	0.000068	0.000203	
* Lead, Total	5/20/22 09:54	5/20/22 16:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 16:12		1.015	1.25	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 16:12		1.015	0.000121	mg/L	0.000102	0.000203	J
* Potassium, Total	5/20/22 09:54	5/20/22 16:12		1.015	1.32	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 5/17/22 08:15
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09623

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 16:12		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 16:12		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	0.00254	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	0.182	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	0.000457	mg/L	0.000068	0.000203	
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	1.26	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	1.31	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 11:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/23/22 13:55	5/23/22 13:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	162	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	367	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	161	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	0.564	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 00:45	5/21/22 00:45		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 5/17/22 08:15
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09623

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/20/22 09:27	5/20/22 09:27		1	5.92	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/20/22 14:23	5/20/22 14:23		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/7/22 09:58	6/7/22 09:58		10	145	mg/L	6.0	20	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	5/17/22 08:10	5/17/22 08:10			559.32	uS/cm			FA
pH	5/17/22 08:10	5/17/22 08:10			6.44	SU			FA
Temperature	5/17/22 08:10	5/17/22 08:10			19.12	C			FA
Turbidity	5/17/22 08:10	5/17/22 08:10			4.55	NTU			FA
Sulfide	5/17/22 08:10	5/17/22 08:10			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 08:15
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BC09623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09623	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.103	0.107	0.113	0.0850 to 0.115	103	70.0 to 130	3.81	20.0
BC09625	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09623	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0950	0.0987	0.0924	0.0850 to 0.115	95.0	70.0 to 130	3.82	20.0
BC09625	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0923	0.0920	0.0921	0.0850 to 0.115	92.3	70.0 to 130	0.326	20.0
BC09623	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.0998	0.103	0.100	0.0850 to 0.115	97.3	70.0 to 130	3.16	20.0
BC09625	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09623	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.271	0.285	0.0989	0.0850 to 0.115	89.0	70.0 to 130	5.04	20.0
BC09625	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09623	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.102	0.107	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BC09625	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BC09623	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.14	1.14	0.992	0.850 to 1.15	99.5	70.0 to 130	0.00	20.0
BC09625	Boron, Total	mg/L	0.000001	0.0650	1.00	0.972	0.989	0.962	0.850 to 1.15	97.2	70.0 to 130	1.73	20.0
BC09623	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0969	0.100	0.105	0.0850 to 0.115	96.9	70.0 to 130	3.15	20.0
BC09625	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.100	0.0998	0.0976	0.0850 to 0.115	100	70.0 to 130	0.200	20.0
BC09623	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	87.8	87.5	5.20	4.25 to 5.75	78.0	70.0 to 130	0.342	20.0
BC09625	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.91	4.95	5.02	4.25 to 5.75	98.2	70.0 to 130	0.811	20.0
BC09625	Chloride	mg/L	-0.142	1.00	10.0	10.5	10.3	10.6	9.00 to 11.0	105	80.0 to 120	1.92	20.0
BC09623	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.0965	0.0995	0.104	0.0850 to 0.115	96.3	70.0 to 130	3.06	20.0
BC09625	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0982	0.0975	0.0948	0.0850 to 0.115	98.2	70.0 to 130	0.715	20.0
BC09623	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.0977	0.101	0.106	0.0850 to 0.115	97.2	70.0 to 130	3.32	20.0
BC09625	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09625	Fluoride	mg/L	-0.0584	0.125	2.50	2.53	2.53	2.46	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC09623	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	13.5	13.5	0.202	0.170 to 0.230	50.0	70.0 to 130	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 08:15
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BC09623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Iron, Total	mg/L	0.000091	0.0176	0.2	0.197	0.197	0.194	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BC09623	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.101	0.0997	0.100	0.0850 to 0.115	101	70.0 to 130	1.30	20.0
BC09625	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09623	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.219	0.219	0.204	0.170 to 0.230	110	70.0 to 130	0.00	20.0
BC09625	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.197	0.199	0.202	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BC09623	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	18.1	18.2	5.32	4.25 to 5.75	106	70.0 to 130	0.551	20.0
BC09625	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.05	5.12	5.14	4.25 to 5.75	101	70.0 to 130	1.38	20.0
BC09623	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	1.33	1.37	0.106	0.0850 to 0.115	70.0	70.0 to 130	2.96	20.0
BC09625	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.104	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09625	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00361	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	0.828	20.0
BC09623	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.0952	0.0975	0.0997	0.0850 to 0.115	95.2	70.0 to 130	2.39	20.0
BC09625	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09623	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	11.3	11.6	10.6	8.50 to 11.5	99.9	70.0 to 130	2.62	20.0
BC09625	Potassium, Total	mg/L	0.00593	0.367	10.0	10.2	10.4	10.4	8.50 to 11.5	102	70.0 to 130	1.94	20.0
BC09623	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.100	0.105	0.105	0.0850 to 0.115	100	70.0 to 130	4.88	20.0
BC09625	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09623	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	13.3	13.3	1.04	0.850 to 1.15	100	70.0 to 130	0.00	20.0
BC09625	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.989	0.993	0.998	0.850 to 1.15	98.9	70.0 to 130	0.404	20.0
BC09623	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	19.4	19.4	5.13	4.25 to 5.75	114	70.0 to 130	0.00	20.0
BC09625	Sodium, Total	mg/L	0.00163	0.0660	5.00	4.94	4.98	5.03	4.25 to 5.75	98.8	70.0 to 130	0.806	20.0
BC09625	Sulfate	mg/L	-0.310	2.0	20.0	20.1	19.9	18.6	18.0 to 22.0	100	80.0 to 120	1.00	20.0
BC09623	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0991	0.0986	0.103	0.0850 to 0.115	99.1	70.0 to 130	0.506	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 08:15
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BC09623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09625	Total Organic Carbon	mg/L	0.290	1.00	10.0	10.3	10.2	9.65		103	80.0 to 120	0.976	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/17/22 08:15
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BC09623

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09625	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.20	0.060	1.94	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 5/17/22 09:18
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09624

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 10:59		1.015	0.385	mg/L	0.030000	0.1015	
* Calcium, Total	5/23/22 14:20	5/24/22 10:59		1.015	9.99	mg/L	0.070035	0.406	
* Iron, Total	5/23/22 14:20	5/24/22 10:59		1.015	0.143	mg/L	0.008120	0.0406	
* Lithium, Total	5/23/22 14:20	5/24/22 10:59		1.015	0.0499	mg/L	0.007105	0.01999956	
* Magnesium, Total	5/23/22 14:20	5/24/22 10:59		1.015	2.26	mg/L	0.021315	0.406	
Silica, Total (calc.)	5/23/22 14:20	5/24/22 10:59		1	9.50	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 10:59		1.015	4.44	mg/L	0.02030	0.25375	
* Sodium, Total	5/23/22 14:20	5/24/22 12:20		10.15	83.1	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Boron, Dissolved	5/23/22 13:00	5/24/22 11:36		1.015	0.382	mg/L	0.030000	0.1015	
* Calcium, Dissolved	5/23/22 13:00	5/24/22 11:36		1.015	10.5	mg/L	0.070035	0.406	
* Iron, Dissolved	5/23/22 13:00	5/24/22 11:36		1.015	0.0428	mg/L	0.008120	0.0406	
* Lithium, Dissolved	5/23/22 13:00	5/24/22 11:36		1.015	0.0551	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	5/23/22 13:00	5/24/22 11:36		1.015	2.31	mg/L	0.021315	0.406	
Silica, Dissolved (calc.)	5/23/22 13:00	5/24/22 11:36		1	9.74	mg/L			
Silicon, Dissolved	5/23/22 13:00	5/24/22 11:36		1.015	4.55	mg/L	0.02030	0.25375	
* Sodium, Dissolved	5/23/22 13:00	5/24/22 12:34		10.15	88.4	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 16:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.109	mg/L	0.006090	0.01015	
* Arsenic, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.00303	mg/L	0.000081	0.000203	
* Barium, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.276	mg/L	0.000508	0.001015	
* Beryllium, Total	5/20/22 09:54	5/20/22 16:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.000320	mg/L	0.000203	0.001015	J
* Cobalt, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.0000820	mg/L	0.000068	0.000203	J
* Lead, Total	5/20/22 09:54	5/20/22 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.0218	mg/L	0.000152	0.000203	
* Molybdenum, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.00280	mg/L	0.000102	0.000203	
* Potassium, Total	5/20/22 09:54	5/20/22 16:16		1.015	0.578	mg/L	0.169505	0.5075	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 5/17/22 09:18
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09624

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	5/20/22 09:54	5/20/22 16:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 16:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.0137	mg/L	0.006090	0.01015	
* Arsenic, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.00275	mg/L	0.000081	0.000203	
* Barium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.262	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.000231	mg/L	0.000203	0.001015	J
* Cobalt, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.0175	mg/L	0.000152	0.000203	
* Molybdenum, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.00263	mg/L	0.000102	0.000203	
* Potassium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	0.602	mg/L	0.169505	0.5075	
* Selenium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	5/20/22 14:34	5/20/22 18:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 11:07		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/23/22 13:55	5/23/22 13:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	216	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	238	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	210	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	6.09	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 01:04	5/21/22 01:04		1	Not Detected	mg/L	1.00	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 5/17/22 09:18
Customer ID:
Submittal Date: 5/18/22 14:37

Laboratory ID Number: BC09624

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:28	5/20/22 09:28		1	1.69	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:24	5/20/22 14:24		1	1.27	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 09:37	6/7/22 09:37		1	6.55	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/17/22 09:14	5/17/22 09:14			396.46	uS/cm			FA
pH	5/17/22 09:14	5/17/22 09:14			8.29	SU			FA
Temperature	5/17/22 09:14	5/17/22 09:14			17.09	C			FA
Turbidity	5/17/22 09:14	5/17/22 09:14			2.64	NTU			FA
Sulfide	5/17/22 09:14	5/17/22 09:14			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:18
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BC09624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09624	Aluminum, Dissolved	mg/L	0.000180	0.010	0.100	0.119	0.121	0.113	0.0850 to 0.115	105	70.0 to 130	1.67	20.0
BC09625	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09624	Antimony, Dissolved	mg/L	0.000322	0.00100	0.100	0.0962	0.0945	0.0924	0.0850 to 0.115	96.2	70.0 to 130	1.78	20.0
BC09625	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0923	0.0920	0.0921	0.0850 to 0.115	92.3	70.0 to 130	0.326	20.0
BC09624	Arsenic, Dissolved	mg/L	-0.0000338	0.000176	0.100	0.103	0.0994	0.100	0.0850 to 0.115	100	70.0 to 130	3.56	20.0
BC09625	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09624	Barium, Dissolved	mg/L	0.0000000	0.00100	0.100	0.364	0.358	0.0989	0.0850 to 0.115	102	70.0 to 130	1.66	20.0
BC09625	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09624	Beryllium, Dissolved	mg/L	0.000145	0.000880	0.100	0.104	0.105	0.107	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09625	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BC09624	Boron, Dissolved	mg/L	0.00122	0.0650	1.00	1.38	1.38	0.992	0.850 to 1.15	99.8	70.0 to 130	0.00	20.0
BC09625	Boron, Total	mg/L	0.000001	0.0650	1.00	0.972	0.989	0.962	0.850 to 1.15	97.2	70.0 to 130	1.73	20.0
BC09624	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.102	0.0997	0.105	0.0850 to 0.115	102	70.0 to 130	2.28	20.0
BC09625	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.100	0.0998	0.0976	0.0850 to 0.115	100	70.0 to 130	0.200	20.0
BC09624	Calcium, Dissolved	mg/L	0.000223	0.152	5.00	15.6	15.7	5.20	4.25 to 5.75	102	70.0 to 130	0.639	20.0
BC09625	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.91	4.95	5.02	4.25 to 5.75	98.2	70.0 to 130	0.811	20.0
BC09625	Chloride	mg/L	-0.142	1.00	10.0	10.5	10.3	10.6	9.00 to 11.0	105	80.0 to 120	1.92	20.0
BC09624	Chromium, Dissolved	mg/L	-0.0000597	0.000440	0.100	0.101	0.0985	0.104	0.0850 to 0.115	101	70.0 to 130	2.51	20.0
BC09625	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0982	0.0975	0.0948	0.0850 to 0.115	98.2	70.0 to 130	0.715	20.0
BC09624	Cobalt, Dissolved	mg/L	-0.0000013	0.000147	0.100	0.101	0.100	0.106	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BC09625	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09625	Fluoride	mg/L	-0.0584	0.125	2.50	2.53	2.53	2.46	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC09624	Iron, Dissolved	mg/L	0.000143	0.0176	0.2	0.242	0.244	0.202	0.170 to 0.230	99.6	70.0 to 130	0.823	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:18
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BC09624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Iron, Total	mg/L	0.000091	0.0176	0.2	0.197	0.197	0.194	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BC09624	Lead, Dissolved	mg/L	0.0000037	0.000147	0.100	0.0969	0.0997	0.100	0.0850 to 0.115	96.9	70.0 to 130	2.85	20.0
BC09625	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09624	Lithium, Dissolved	mg/L	2.760E-05	0.0154	0.200	0.266	0.269	0.204	0.170 to 0.230	105	70.0 to 130	1.12	20.0
BC09625	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.197	0.199	0.202	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BC09624	Magnesium, Dissolved	mg/L	0.000912	0.0462	5.00	7.51	7.62	5.32	4.25 to 5.75	104	70.0 to 130	1.45	20.0
BC09625	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.05	5.12	5.14	4.25 to 5.75	101	70.0 to 130	1.38	20.0
BC09624	Manganese, Dissolved	mg/L	0.0000021	0.0002	0.100	0.120	0.117	0.106	0.0850 to 0.115	102	70.0 to 130	2.53	20.0
BC09625	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.104	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09625	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00361	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	0.828	20.0
BC09624	Molybdenum, Dissolved	mg/L	0.0000081	0.0002	0.100	0.103	0.0987	0.0997	0.0850 to 0.115	100	70.0 to 130	4.26	20.0
BC09625	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09624	Potassium, Dissolved	mg/L	0.0135	0.367	10.0	10.7	10.6	10.6	8.50 to 11.5	101	70.0 to 130	0.939	20.0
BC09625	Potassium, Total	mg/L	0.00593	0.367	10.0	10.2	10.4	10.4	8.50 to 11.5	102	70.0 to 130	1.94	20.0
BC09624	Selenium, Dissolved	mg/L	0.0000700	0.00100	0.100	0.105	0.102	0.105	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BC09625	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09624	Silicon, Dissolved	mg/L	0.000439	0.0440	1.00	5.60	5.62	1.04	0.850 to 1.15	105	70.0 to 130	0.357	20.0
BC09625	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.989	0.993	0.998	0.850 to 1.15	98.9	70.0 to 130	0.404	20.0
BC09624	Sodium, Dissolved	mg/L	-0.000235	0.0660	5.00	94.0	91.7	5.13	4.25 to 5.75	112	70.0 to 130	2.48	20.0
BC09625	Sodium, Total	mg/L	0.00163	0.0660	5.00	4.94	4.98	5.03	4.25 to 5.75	98.8	70.0 to 130	0.806	20.0
BC09625	Sulfate	mg/L	-0.310	2.0	20.0	20.1	19.9	18.6	18.0 to 22.0	100	80.0 to 120	1.00	20.0
BC09624	Thallium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0948	0.0953	0.103	0.0850 to 0.115	94.8	70.0 to 130	0.526	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:18
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BC09624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09625	Total Organic Carbon	mg/L	0.290	1.00	10.0	10.3	10.2	9.65		103	80.0 to 120	0.976	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/17/22 09:18
Customer ID:
Delivery Date: 5/18/22 14:37

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BC09624

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09625	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.20	0.060	1.94	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-2

Location Code: WMWGADAPFB
Collected: 5/17/22 09:45
Customer ID:
Submittal Date: 5/18/22 15:04

Laboratory ID Number: BC09625

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.021315	0.406	U
Silica, Total (calc.)	5/23/22 14:20	5/24/22 11:02		1	Not Detected	mg/L			
Silicon, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	5/23/22 14:20	5/24/22 11:02		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.006090	0.01015	U
* Arsenic, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000152	0.000203	U
* Molybdenum, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	5/20/22 09:54	5/20/22 16:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	6/3/22 12:09	6/6/22 11:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/23/22 13:56	5/23/22 13:56		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	5/23/22 11:40	5/24/22 13:30		1	Not Detected	mg/L		25	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-2

Location Code: WMWGADAPFB
Collected: 5/17/22 09:45
Customer ID:
Submittal Date: 5/18/22 15:04

Laboratory ID Number: BC09625

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: ELH***							
* Total Organic Carbon	5/21/22 01:23	5/21/22 01:23		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	5/20/22 09:29	5/20/22 09:29		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	5/20/22 14:25	5/20/22 14:25		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	6/7/22 09:38	6/7/22 09:38		1	Not Detected	mg/L	0.6	2	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 5/17/22 09:45
Customer ID:
Delivery Date: 5/18/22 15:04

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BC09625

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Aluminum, Total	mg/L	0.00123	0.010	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09625	Antimony, Total	mg/L	0.000383	0.00100	0.100	0.0923	0.0920	0.0921	0.0850 to 0.115	92.3	70.0 to 130	0.326	20.0
BC09625	Arsenic, Total	mg/L	0.0000140	0.000176	0.100	0.102	0.101	0.101	0.0850 to 0.115	102	70.0 to 130	0.985	20.0
BC09625	Barium, Total	mg/L	-0.0000083	0.00100	0.100	0.102	0.103	0.101	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BC09625	Beryllium, Total	mg/L	0.0000168	0.000880	0.100	0.111	0.109	0.111	0.0850 to 0.115	111	70.0 to 130	1.82	20.0
BC09625	Boron, Total	mg/L	0.000001	0.0650	1.00	0.972	0.989	0.962	0.850 to 1.15	97.2	70.0 to 130	1.73	20.0
BC09625	Cadmium, Total	mg/L	0.0000121	0.000147	0.100	0.100	0.0998	0.0976	0.0850 to 0.115	100	70.0 to 130	0.200	20.0
BC09625	Calcium, Total	mg/L	-0.00142	0.152	5.00	4.91	4.95	5.02	4.25 to 5.75	98.2	70.0 to 130	0.811	20.0
BC09625	Chloride	mg/L	-0.142	1.00	10.0	10.5	10.3	10.6	9.00 to 11.0	105	80.0 to 120	1.92	20.0
BC09625	Chromium, Total	mg/L	-0.0000826	0.000440	0.100	0.0982	0.0975	0.0948	0.0850 to 0.115	98.2	70.0 to 130	0.715	20.0
BC09625	Cobalt, Total	mg/L	-0.0000030	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	103	70.0 to 130	0.966	20.0
BC09625	Fluoride	mg/L	-0.0584	0.125	2.50	2.53	2.53	2.46	2.25 to 2.75	101	80.0 to 120	0.00	20.0
BC09625	Iron, Total	mg/L	0.000091	0.0176	0.2	0.197	0.197	0.194	0.170 to 0.230	98.5	70.0 to 130	0.00	20.0
BC09625	Lead, Total	mg/L	0.0000026	0.000147	0.100	0.105	0.105	0.104	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BC09625	Lithium, Total	mg/L	-0.000132	0.0154	0.200	0.197	0.199	0.202	0.170 to 0.230	98.5	70.0 to 130	1.01	20.0
BC09625	Magnesium, Total	mg/L	-0.00521	0.0462	5.00	5.05	5.12	5.14	4.25 to 5.75	101	70.0 to 130	1.38	20.0
BC09625	Manganese, Total	mg/L	-0.0000001	0.0002	0.100	0.104	0.105	0.102	0.0850 to 0.115	104	70.0 to 130	0.957	20.0
BC09625	Mercury, Total by CVAA	mg/L	6.620E-06	0.000500	0.004	0.00364	0.00361	0.00377	0.00340 to 0.00460	91.0	70.0 to 130	0.828	20.0
BC09625	Molybdenum, Total	mg/L	-0.0000018	0.0002	0.100	0.101	0.102	0.103	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BC09625	Potassium, Total	mg/L	0.00593	0.367	10.0	10.2	10.4	10.4	8.50 to 11.5	102	70.0 to 130	1.94	20.0
BC09625	Selenium, Total	mg/L	0.0000246	0.00100	0.100	0.104	0.104	0.105	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BC09625	Silicon, Total	mg/L	0.000276	0.0440	1.00	0.989	0.993	0.998	0.850 to 1.15	98.9	70.0 to 130	0.404	20.0
BC09625	Sodium, Total	mg/L	0.00163	0.0660	5.00	4.94	4.98	5.03	4.25 to 5.75	98.8	70.0 to 130	0.806	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 5/17/22 09:45
Customer ID:
Delivery Date: 5/18/22 15:04

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BC09625

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Sulfate	mg/L	-0.310	2.0	20.0	20.1	19.9	18.6	18.0 to 22.0	100	80.0 to 120	1.00	20.0
BC09625	Thallium, Total	mg/L	-0.0000025	0.000147	0.100	0.106	0.104	0.106	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BC09625	Total Organic Carbon	mg/L	0.290	1.00	10.0	10.3	10.2	9.65		103	80.0 to 120	0.976	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 5/17/22 09:45
Customer ID:
Delivery Date: 5/18/22 15:04

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BC09625

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09625	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.20	0.060	1.94	1.80 to 2.20	110	90.0 to 110	0.00	15.0
BC09624	Solids, Dissolved	mg/L	1.00	25.0			247	46.0	40.0 to 60.0			3.71	10.0

Comments:

Reported: 6/10/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Alabama Power

Project Number: WMWGADAP_1363

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
PA	Precision is invalid due to sample concentration.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: FB-1 bottle 6 labeled as HNO3 preserved. Sample container discarded. Bottle 5 will be used for analysis.
FB-1 bottle 4 labeled HNO3 preserved. Suspected to be preserved with H2SO4. Confirmed by IC analysis.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-1	05/09/2022	12:56	7	Groundwater		BC09092
MW-5	05/09/2022	14:28	7	Groundwater		BC09093
PZ-2	05/09/2022	15:33	7	Groundwater		BC09094
FB-1	05/09/2022	16:00	4	Field Blank		BC09095
MW-6	05/10/2022	09:33	7	Groundwater		BC09096
MW-6 dup	05/10/2022	09:33	7	Sample Duplicate		BC09097
MW-7	05/10/2022	10:38	7	Groundwater		BC09098
MW-10	05/10/2022	12:05	7	Groundwater		BC09099
MW-12	05/10/2022	13:17	7	Groundwater		BC09100
MW-4V	05/11/2022	09:11	7	Groundwater		BC09101

Relinquished By	Received By	Date/Time
		05/11/2022 11:48

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	2.2 °C
Sample Event	1363	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

8.0

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
	2	Dissolved Metals	500 mL	4	Nitrates/Nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: NO3/NO2, TOC pH > 2 SU. BC 05/11/22

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	05/09/2022	13:40	7	Groundwater		BC09102
MW-14	05/09/2022	15:37	7	Groundwater		BC09103
MW-1	05/10/2022	08:35	7	Groundwater		BC09104
MW-1 Dup	05/10/2022	08:35	7	Sample Duplicate		BC09105
MW-18H	05/10/2022	09:53	7	Groundwater		BC09106
PZ-5	05/10/2022	11:05	7	Groundwater		BC09107
PZ-6	05/10/2022	12:18	7	Groundwater		BC09108
MW-3	05/10/2022	13:25	7	Groundwater		BC09109
MW-8	05/11/2022	08:40	7	Groundwater		BC09110
MW-9	05/11/2022	10:12	7	Groundwater		BC09111

Relinquished By	Received By	Date/Time
		05/11/2022 12:32

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	2.8 °C
Sample Event	1363	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrates/nitrites, TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Relinquished to GSC Building 8 Shipping lab. DFG 051822
NO2/NO3, TOC pH <2 SU 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2VB	05/16/2022	11:58	7	Groundwater		BC09621
MW-16	05/17/2022	06:50	7	Groundwater		BC09622
MW-11	05/17/2022	08:15	7	Groundwater		BC09623
MW-22VB	05/17/2022	09:18	7	Groundwater		BC09624
FB-2	05/17/2022	09:45	5	Field Blank		BC09625

Relinquished By	Received By	Date/Time
		05/17/2022 10:25
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:33:00 -05'00'	05/25/2022 09:22

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	1.2 °C
Sample Event	1363	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrite/Nitrate; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Relinquish to Shipping Lab secure room @0855 051822 AWG
NO2/NO3, TOC pH <2 SU 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2	05/16/2022	12:05	1	Groundwater		BC09611
FB-3	05/16/2022	14:40	1	Field Blank		BC09612
MW-4	05/16/2022	14:45	1	Groundwater		BC09613

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:32:07 -05'00'	05/18/2022 14:32

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.9 °C
Sample Event	1363	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
1	Metals	500 mL	3	Hg	250 mL	5	TDS	500 mL	7	Alkalinity	250 mL
2	Dissolved Metals	500 mL	4	Nitrate/Nitrite; TOC	250 mL	6	Anions	250 mL	8	N/A	N/A

Comments: Relinquished to GSC Building 8 Shipping lab. DFG 051822
NO2/NO3, TOC pH <2 SU 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2VA	05/16/2022	11:08	7	Groundwater		BC09614
MW-19H	05/16/2022	14:09	7	Groundwater		BC09615
MW-19H dup	05/16/2022	14:09	7	Sample Duplicate		BC09616
MW-21VC	05/17/2022	09:56	7	Groundwater		BC09617
MW-20H	05/17/2022	11:58	7	Groundwater		BC09618
EB-1	05/17/2022	12:30	5	Equipment Blank		BC09619
EB-2	05/17/2022	12:45	5	Equipment Blank		BC09620

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:32:29 -05'00'	05/18/2022 09:24

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	1.3 °C
Sample Event	1363	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

✔ Field Complete ✔ Lab Complete ✔ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at PZ-1

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-1	05/09/2022	12:56	3	Groundwater		BC09112
MW-5	05/09/2022	14:28	1	Groundwater		BC09113
PZ-2	05/09/2022	15:33	1	Groundwater		BC09114
FB-1	05/09/2022	16:00	1	Field Blank		BC09115
MW-6	05/10/2022	09:33	1	Groundwater		BC09116
MW-6 dup	05/10/2022	09:33	1	Sample Duplicate		BC09117
MW-7	05/10/2022	10:38	1	Groundwater		BC09118
MW-10	05/10/2022	12:05	1	Groundwater		BC09119
MW-12	05/10/2022	13:17	1	Groundwater		BC09120
MW-4V	05/11/2022	09:11	1	Groundwater		BC09121

Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Cotton	05/11/2022 11:48

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	✔
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1363	Thermometer ID	N/A
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Rad Ms/MSD collected @ MW-18H

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-17	05/09/2022	13:40	1	Groundwater		BC09122
MW-14	05/09/2022	15:37	1	Groundwater		BC09123
MW-1	05/10/2022	08:35	1	Groundwater		BC09124
MW-1 Dup	05/10/2022	08:35	1	Sample Duplicate		BC09125
MW-18H	05/10/2022	09:53	3	Groundwater		BC09126
PZ-5	05/10/2022	11:05	1	Groundwater		BC09127
PZ-6	05/10/2022	12:18	1	Groundwater		BC09128
MW-3	05/10/2022	13:25	1	Groundwater		BC09129
MW-8	05/11/2022	08:40	1	Groundwater		BC09130
MW-9	05/11/2022	10:12	1	Groundwater		BC09131

Relinquished By	Received By	Date/Time
		05/11/2022 12:32

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	N/A
Sample Event	1363	Thermometer ID	N/A
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquished to GSC Building 8 Shipping lab. DFG 051822

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2VB	05/16/2022	11:58	1	Groundwater		BC09636
MW-16	05/17/2022	06:50	1	Groundwater		BC09637
MW-11	05/17/2022	08:15	1	Groundwater		BC09638
MW-22VB	05/17/2022	09:18	1	Groundwater		BC09639
FB-2	05/17/2022	09:45	1	Field Blank		BC09640

Relinquished By	Received By	Date/Time
		05/17/2022 10:25
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:33:58 -05'00'	05/18/2022 09:23

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	NA
Sample Event	1363	Thermometer ID	NA
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles															
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquish to Shipping Lab secure room @0855 051822 AWG

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2	05/16/2022	12:05	1	Groundwater		BC09626
FB-3	05/16/2022	14:40	1	Field Blank		BC09627
MW-4	05/16/2022	14:45	1	Groundwater		BC09628

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:33:26 -05'00'	05/18/2022 14:33

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	NA
Sample Event	1363	Thermometer ID	NA
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles															
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Relinquished to GSC Building 8 Shipping lab. DFG 051822

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2VA	05/16/2022	11:08	1	Groundwater		BC09629
MW-19H	05/16/2022	14:09	1	Groundwater		BC09630
MW-19H dup	05/16/2022	14:09	1	Sample Duplicate		BC09631
MW-21VC	05/17/2022	09:56	1	Groundwater		BC09632
MW-20H	05/17/2022	11:58	1	Groundwater		BC09633
EB-1	05/17/2022	12:30	1	Equipment Blank		BC09634
EB-2	05/17/2022	12:45	1	Equipment Blank		BC09635

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:33:43 -05'00'	05/18/2022 09:23

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	NA
Sample Event	1363	Thermometer ID	NA
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

July 12, 2022

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGADAP_1363
Pace Project No.: 30493174

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on May 23, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Blaine Denton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: WMWGADAP_1363
Pace Project No.: 30493174

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 460198
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30493174001	BC09112 PZ-1	Water	05/09/22 12:56	05/23/22 10:45
30493174002	BC09112 PZ-1 MS	Water	05/09/22 12:56	05/23/22 10:45
30493174003	BC09112 PZ-1 MSD	Water	05/09/22 12:56	05/23/22 10:45
30493174004	BC09113 MW-5	Water	05/09/22 14:28	05/23/22 10:45
30493174005	BC09114 PZ-2	Water	05/09/22 15:33	05/23/22 10:45
30493174006	BC09115 FB-1	Water	05/09/22 16:00	05/23/22 10:45
30493174007	BC09116 MW-6	Water	05/10/22 09:33	05/23/22 10:45
30493174008	BC09117 MW-6 Dup	Water	05/10/22 09:33	05/23/22 10:45
30493174009	BC09118 MW-7	Water	05/10/22 10:38	05/23/22 10:45
30493174010	BC09119 MW-10	Water	05/10/22 12:05	05/23/22 10:45
30493174011	BC09120 MW-12	Water	05/10/22 13:17	05/23/22 10:45
30493174012	BC09121 MW-4V	Water	05/11/22 09:11	05/23/22 10:45
30493174013	BC09122 MW-17	Water	05/09/22 13:40	05/23/22 10:45
30493174014	BC09123 MW-14	Water	05/09/22 15:37	05/23/22 10:45
30493174015	BC09124 MW-1	Water	05/10/22 08:35	05/23/22 10:45
30493174016	BC09125 MW-1 Dup	Water	05/10/22 08:35	05/23/22 10:45
30493174017	BC09126 MW-18H	Water	05/10/22 09:53	05/23/22 10:45
30493174018	BC09126 MW-18H MS	Water	05/10/22 09:53	05/23/22 10:45
30493174019	BC09126 MW-18H MSD	Water	05/10/22 09:53	05/23/22 10:45
30493174020	BC09127 PZ-5	Water	05/10/22 11:05	05/23/22 10:45
30493174021	BC09128 PZ-6	Water	05/10/22 12:18	05/23/22 10:45
30493174022	BC09129 MW-3	Water	05/10/22 13:25	05/23/22 10:45
30493174023	BC09130 MW-8	Water	05/11/22 08:40	05/23/22 10:45
30493174024	BC09131 MW-9	Water	05/11/22 10:12	05/23/22 10:45
30493174025	BC09626 MW-2	Water	05/16/22 12:05	05/23/22 10:45
30493174026	BC09627 FB-3	Water	05/16/22 14:40	05/23/22 10:45
30493174027	BC09628 MW-4	Water	05/16/22 14:45	05/23/22 10:45
30493174028	BC09629 MW-2VA	Water	05/16/22 11:08	05/23/22 10:45
30493174029	BC09630 MW-19H	Water	05/16/22 14:09	05/23/22 10:45
30493174030	BC09631 MW-19H Dup	Water	05/16/22 14:09	05/23/22 10:45
30493174031	BC09632 MW-21VC	Water	05/17/22 09:56	05/23/22 10:45
30493174032	BC09633 MW-20H	Water	05/17/22 11:58	05/23/22 10:45
30493174033	BC09634 EB-1	Water	05/17/22 12:30	05/23/22 10:45
30493174034	BC09635 EB-2	Water	05/17/22 12:45	05/23/22 10:45
30493174035	BC09636 MW-2VB	Water	05/16/22 11:58	05/23/22 10:45
30493174036	BC09637 MW-16	Water	05/17/22 06:50	05/23/22 10:45
30493174037	BC09638 MW-11	Water	05/17/22 08:15	05/23/22 10:45

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE SUMMARY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30493174038	**BC09639 MW-22VB**	Water	05/17/22 09:18	05/23/22 10:45
30493174039	**BC09640 FB-2**	Water	05/17/22 09:45	05/23/22 10:45

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30493174001	**BC09112 PZ-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174002	**BC09112 PZ-1 MS**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30493174003	**BC09112 PZ-1 MSD**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30493174004	**BC09113 MW-5**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174005	**BC09114 PZ-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174006	**BC09115 FB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174007	**BC09116 MW-6**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174008	**BC09117 MW-6 Dup**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174009	**BC09118 MW-7**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174010	**BC09119 MW-10**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174011	**BC09120 MW-12**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174012	**BC09121 MW-4V**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174013	**BC09122 MW-17**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

SAMPLE ANALYTE COUNT

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30493174014	**BC09123 MW-14**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174015	**BC09124 MW-1**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174016	**BC09125 MW-1 Dup**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174017	**BC09126 MW-18H**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174018	**BC09126 MW-18H MS**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30493174019	**BC09126 MW-18H MSD**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
30493174020	**BC09127 PZ-5**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174021	**BC09128 PZ-6**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174022	**BC09129 MW-3**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174023	**BC09130 MW-8**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174024	**BC09131 MW-9**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174025	**BC09626 MW-2**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174026	**BC09627 FB-3**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30493174027	**BC09628 MW-4**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174028	**BC09629 MW-2VA**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174029	**BC09630 MW-19H**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174030	**BC09631 MW-19H Dup**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174031	**BC09632 MW-21VC**	EPA 9315	VAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174032	**BC09633 MW-20H**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174033	**BC09634 EB-1**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174034	**BC09635 EB-2**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174035	**BC09636 MW-2VB**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174036	**BC09637 MW-16**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174037	**BC09638 MW-11**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174038	**BC09639 MW-22VB**	EPA 9315	JC2	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30493174039	**BC09640 FB-2**	EPA 9315	JC2	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: WMWGADAP_1363
Pace Project No.: 30493174

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: July 12, 2022

General Information:
39 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGADAP_1363
Pace Project No.: 30493174

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: July 12, 2022

General Information:
39 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: WMWGADAP_1363
Pace Project No.: 30493174

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: July 12, 2022

General Information:
35 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09112 PZ-1 **Lab ID: 30493174001** Collected: 05/09/22 12:56 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0688U ± 0.122 (0.274) C:76% T:NA**	pCi/L	07/08/22 10:46	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.715 ± 0.379 (0.665) C:71% T:94%**	pCi/L	06/29/22 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.784U ± 0.501 (0.939)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09112 PZ-1 MS **Lab ID: 30493174002** Collected: 05/09/22 12:56 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**100.46 %REC ± NA (NA) C:NA T:NA**	pCi/L	07/08/22 10:47	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**92.17 %REC ± NA (NA) C:NA T:NA**	pCi/L	06/29/22 11:48	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09112 PZ-1 MSD **Lab ID: 30493174003** Collected: 05/09/22 12:56 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**105.44 %REC 4.83 RPD ± NA (NA) C:NA T:NA**	pCi/L	07/08/22 10:45	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**101.58 %REC 9.71 RPD ± NA (NA) C:NA T:NA**	pCi/L	06/29/22 11:48	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09113 MW-5 **Lab ID: 30493174004** Collected: 05/09/22 14:28 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.263 ± 0.164 (0.238) C:89% T:NA**	pCi/L	07/08/22 12:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.897 ± 0.435 (0.731) C:67% T:89%**	pCi/L	06/29/22 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16 ± 0.599 (0.969)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09114 PZ-2 **Lab ID: 30493174005** Collected: 05/09/22 15:33 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0576U ± 0.105 (0.238) C:94% T:NA**	pCi/L	07/08/22 12:41	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.294U ± 0.283 (0.569) C:69% T:94%**	pCi/L	06/29/22 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.352U ± 0.388 (0.807)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09115 FB-1 **Lab ID: 30493174006** Collected: 05/09/22 16:00 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0636U ± 0.116 (0.262) C:91% T:NA**	pCi/L	07/08/22 12:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0341U ± 0.295 (0.687) C:69% T:89%**	pCi/L	06/29/22 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0977U ± 0.411 (0.949)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09116 MW-6 **Lab ID: 30493174007** Collected: 05/10/22 09:33 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0979U ± 0.145 (0.315) C:86% T:NA**	pCi/L	07/08/22 16:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.00631U ± 0.344 (0.806) C:68% T:86%**	pCi/L	06/29/22 11:48	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.0979U ± 0.489 (1.12)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09117 MW-6 Dup **Lab ID: 30493174008** Collected: 05/10/22 09:33 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.254U ± 0.179 (0.288) C:90% T:NA**	pCi/L	07/08/22 16:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.326U ± 0.343 (0.710) C:70% T:92%**	pCi/L	06/29/22 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.580U ± 0.522 (0.998)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09118 MW-7 **Lab ID: 30493174009** Collected: 05/10/22 10:38 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0865U ± 0.130 (0.283) C:95% T:NA**	pCi/L	07/08/22 16:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.512U ± 0.354 (0.662) C:67% T:91%**	pCi/L	06/29/22 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.599U ± 0.484 (0.945)**	pCi/L	07/11/22 22:41	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09119 MW-10 **Lab ID: 30493174010** Collected: 05/10/22 12:05 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.274U ± 0.216 (0.398) C:87% T:NA**	pCi/L	07/08/22 16:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.147U ± 0.327 (0.727) C:74% T:90%**	pCi/L	06/29/22 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.421U ± 0.543 (1.13)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09120 MW-12 **Lab ID: 30493174011** Collected: 05/10/22 13:17 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.148U ± 0.161 (0.324) C:98% T:NA**	pCi/L	07/08/22 16:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.383U ± 0.346 (0.699) C:76% T:87%**	pCi/L	06/29/22 15:10	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.531U ± 0.507 (1.02)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09121 MW-4V **Lab ID: 30493174012** Collected: 05/11/22 09:11 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.161U ± 0.152 (0.285) C:88% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.415U ± 0.298 (0.572) C:81% T:94%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.576U ± 0.450 (0.857)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09122 MW-17 **Lab ID: 30493174013** Collected: 05/09/22 13:40 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.222U ± 0.167 (0.278) C:88% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.338U ± 0.305 (0.616) C:79% T:92%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.560U ± 0.472 (0.894)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09123 MW-14 **Lab ID: 30493174014** Collected: 05/09/22 15:37 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.511 ± 0.241 (0.272) C:88% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.798 ± 0.393 (0.677) C:78% T:90%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.31 ± 0.634 (0.949)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09124 MW-1 **Lab ID: 30493174015** Collected: 05/10/22 08:35 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0277U ± 0.137 (0.395) C:94% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.761 ± 0.378 (0.646) C:79% T:87%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.761U ± 0.515 (1.04)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09125 MW-1 Dup **Lab ID: 30493174016** Collected: 05/10/22 08:35 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.172U ± 0.154 (0.271) C:92% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.651 ± 0.327 (0.555) C:81% T:93%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.823U ± 0.481 (0.826)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09126 MW-18H **Lab ID: 30493174017** Collected: 05/10/22 09:53 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.242U ± 0.187 (0.310) C:89% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.334U ± 0.331 (0.681) C:77% T:92%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.576U ± 0.518 (0.991)**	pCi/L	07/11/22 22:41	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09126 MW-18H MS **Lab ID: 30493174018** Collected: 05/10/22 09:53 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**101.82 %REC ± NA (NA) C:NA T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**100.04 %REC ± NA (NA) C:NA T:NA**	pCi/L	06/28/22 11:59	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09126 MW-18H MSD **Lab ID: 30493174019** Collected: 05/10/22 09:53 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**93.87 %REC 8.12 RPD ± NA (NA) C:NA T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**94.31 %REC 5.90 RPD ± NA (NA) C:NA T:NA**	pCi/L	06/28/22 11:59	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09127 PZ-5 **Lab ID: 30493174020** Collected: 05/10/22 11:05 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0905U ± 0.153 (0.341) C:88% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.568 ± 0.317 (0.560) C:80% T:94%**	pCi/L	06/28/22 11:59	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.659U ± 0.470 (0.901)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09128 PZ-6 **Lab ID: 30493174021** Collected: 05/10/22 12:18 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.146U ± 0.144 (0.258) C:86% T:NA**	pCi/L	07/08/22 16:19	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.322U ± 0.311 (0.637) C:81% T:91%**	pCi/L	06/28/22 12:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.468U ± 0.455 (0.895)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09129 MW-3 **Lab ID: 30493174022** Collected: 05/10/22 13:25 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0951U ± 0.139 (0.298) C:86% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0942U ± 0.304 (0.687) C:75% T:88%**	pCi/L	06/28/22 15:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.189U ± 0.443 (0.985)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09130 MW-8 **Lab ID: 30493174023** Collected: 05/11/22 08:40 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.130U ± 0.146 (0.290) C:94% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.345U ± 0.325 (0.663) C:76% T:95%**	pCi/L	06/28/22 15:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.475U ± 0.471 (0.953)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09131 MW-9 **Lab ID: 30493174024** Collected: 05/11/22 10:12 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.204U ± 0.157 (0.257) C:92% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.401U ± 0.320 (0.630) C:76% T:93%**	pCi/L	06/28/22 15:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.605U ± 0.477 (0.887)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09626 MW-2 **Lab ID: 30493174025** Collected: 05/16/22 12:05 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.289 ± 0.182 (0.265) C:98% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.772 ± 0.382 (0.644) C:76% T:86%**	pCi/L	06/28/22 15:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.06 ± 0.564 (0.909)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09627 FB-3 **Lab ID: 30493174026** Collected: 05/16/22 14:40 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.175U ± 0.139 (0.221) C:96% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.601U ± 0.340 (0.608) C:74% T:96%**	pCi/L	06/28/22 15:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.776U ± 0.479 (0.829)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09628 MW-4 **Lab ID: 30493174027** Collected: 05/16/22 14:45 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.331 ± 0.208 (0.304) C:86% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.647U ± 0.359 (0.648) C:81% T:93%**	pCi/L	06/28/22 15:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.978 ± 0.567 (0.952)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09629 MW-2VA **Lab ID: 30493174028** Collected: 05/16/22 11:08 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.139U ± 0.140 (0.272) C:107% T:NA**	pCi/L	07/08/22 16:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.146U ± 0.230 (0.498) C:78% T:95%**	pCi/L	06/28/22 15:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.285U ± 0.370 (0.770)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09630 MW-19H **Lab ID: 30493174029** Collected: 05/16/22 14:09 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.227U ± 0.160 (0.253) C:93% T:NA**	pCi/L	07/08/22 16:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.244U ± 0.304 (0.642) C:75% T:88%**	pCi/L	06/28/22 15:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.471U ± 0.464 (0.895)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09631 MW-19H Dup **Lab ID: 30493174030** Collected: 05/16/22 14:09 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.115U ± 0.121 (0.231) C:93% T:NA**	pCi/L	07/08/22 16:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.404U ± 0.360 (0.727) C:75% T:87%**	pCi/L	06/28/22 15:04	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.519U ± 0.481 (0.958)**	pCi/L	07/11/22 22:41	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09632 MW-21VC **Lab ID: 30493174031** Collected: 05/17/22 09:56 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.226 ± 0.142 (0.202) C:123% T:NA**	pCi/L	07/08/22 16:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.174U ± 0.288 (0.627) C:81% T:92%**	pCi/L	06/28/22 15:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.400U ± 0.430 (0.829)**	pCi/L	07/11/22 22:41	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09633 MW-20H **Lab ID: 30493174032** Collected: 05/17/22 11:58 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.235 ± 0.149 (0.194) C:91% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.316U ± 0.318 (0.651) C:69% T:87%**	pCi/L	07/07/22 11:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.551U ± 0.467 (0.845)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09634 EB-1 **Lab ID: 30493174033** Collected: 05/17/22 12:30 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0745U ± 0.103 (0.212) C:93% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.265U ± 0.316 (0.664) C:68% T:92%**	pCi/L	07/07/22 11:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.340U ± 0.419 (0.876)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09635 EB-2 **Lab ID: 30493174034** Collected: 05/17/22 12:45 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0847U ± 0.112 (0.230) C:91% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.411U ± 0.324 (0.638) C:71% T:94%**	pCi/L	07/07/22 11:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.496U ± 0.436 (0.868)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09636 MW-2VB **Lab ID: 30493174035** Collected: 05/16/22 11:58 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.121U ± 0.175 (0.374) C:86% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.132U ± 0.269 (0.594) C:75% T:92%**	pCi/L	07/07/22 11:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.253U ± 0.444 (0.968)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09637 MW-16 **Lab ID: 30493174036** Collected: 05/17/22 06:50 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.458 ± 0.241 (0.300) C:95% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.553U ± 0.358 (0.671) C:67% T:95%**	pCi/L	07/07/22 11:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.01 ± 0.599 (0.971)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09638 MW-11 **Lab ID: 30493174037** Collected: 05/17/22 08:15 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.518 ± 0.290 (0.415) C:85% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.491U ± 0.334 (0.632) C:70% T:93%**	pCi/L	07/07/22 11:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.01U ± 0.624 (1.05)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09639 MW-22VB **Lab ID: 30493174038** Collected: 05/17/22 09:18 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.210U ± 0.174 (0.298) C:84% T:NA**	pCi/L	07/08/22 16:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0959U ± 0.295 (0.666) C:68% T:93%**	pCi/L	07/07/22 11:27	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.306U ± 0.469 (0.964)**	pCi/L	07/11/22 22:42	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

Sample: BC09640 FB-2 **Lab ID: 30493174039** Collected: 05/17/22 09:45 Received: 05/23/22 10:45 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.00198U ± 0.101 (0.287) C:90% T:NA**	pCi/L	07/08/22 16:40	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.477U ± 0.344 (0.667) C:71% T:94%**	pCi/L	07/07/22 11:26	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.479U ± 0.445 (0.954)**	pCi/L	07/11/22 22:42	7440-14-4	

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

QC Batch: 510503 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30493174001, 30493174002, 30493174003, 30493174004, 30493174005, 30493174006, 30493174007, 30493174008, 30493174009, 30493174010, 30493174011

METHOD BLANK: 2474493 Matrix: Water
Associated Lab Samples: 30493174001, 30493174002, 30493174003, 30493174004, 30493174005, 30493174006, 30493174007, 30493174008, 30493174009, 30493174010, 30493174011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.000 ± 0.0853 (0.228) C:80% T:NA	pCi/L	07/08/22 09:00	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

QC Batch: 510504
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30493174012, 30493174013, 30493174014, 30493174015, 30493174016, 30493174017, 30493174018, 30493174019, 30493174020, 30493174021, 30493174022, 30493174023, 30493174024, 30493174025, 30493174026, 30493174027, 30493174028, 30493174029, 30493174030, 30493174031

METHOD BLANK: 2474496
Matrix: Water
Associated Lab Samples: 30493174012, 30493174013, 30493174014, 30493174015, 30493174016, 30493174017, 30493174018, 30493174019, 30493174020, 30493174021, 30493174022, 30493174023, 30493174024, 30493174025, 30493174026, 30493174027, 30493174028, 30493174029, 30493174030, 30493174031

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.141 ± 0.249 (0.545) C:77% T:90%	pCi/L	06/28/22 11:59	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

QC Batch: 510506
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30493174032, 30493174033, 30493174034, 30493174035, 30493174036, 30493174037, 30493174038, 30493174039

METHOD BLANK: 2474498 Matrix: Water
Associated Lab Samples: 30493174032, 30493174033, 30493174034, 30493174035, 30493174036, 30493174037, 30493174038, 30493174039

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.0487 ± 0.230 (0.530) C:76% T:89%	pCi/L	07/07/22 11:29	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

QC Batch: 510507
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30493174032, 30493174033, 30493174034, 30493174035, 30493174036, 30493174037, 30493174038, 30493174039

METHOD BLANK: 2474499 Matrix: Water
Associated Lab Samples: 30493174032, 30493174033, 30493174034, 30493174035, 30493174036, 30493174037, 30493174038, 30493174039

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0236 ± 0.0549 (0.132) C:86% T:NA	pCi/L	07/08/22 16:28	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

QC Batch: 510505
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30493174012, 30493174013, 30493174014, 30493174015, 30493174016, 30493174017, 30493174018, 30493174019, 30493174020, 30493174021, 30493174022, 30493174023, 30493174024, 30493174025, 30493174026, 30493174027, 30493174028, 30493174029, 30493174030, 30493174031

METHOD BLANK: 2474497
Matrix: Water
Associated Lab Samples: 30493174012, 30493174013, 30493174014, 30493174015, 30493174016, 30493174017, 30493174018, 30493174019, 30493174020, 30493174021, 30493174022, 30493174023, 30493174024, 30493174025, 30493174026, 30493174027, 30493174028, 30493174029, 30493174030, 30493174031

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0144 ± 0.0966 (0.249) C:73% T:NA	pCi/L	07/08/22 16:19	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGADAP_1363
Pace Project No.: 30493174

QC Batch: 510502 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30493174001, 30493174002, 30493174003, 30493174004, 30493174005, 30493174006, 30493174007, 30493174008, 30493174009, 30493174010, 30493174011

METHOD BLANK: 2474491 Matrix: Water
Associated Lab Samples: 30493174001, 30493174002, 30493174003, 30493174004, 30493174005, 30493174006, 30493174007, 30493174008, 30493174009, 30493174010, 30493174011

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.619 ± 0.362 (0.653) C:73% T:89%	pCi/L	06/29/22 11:47	

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REPORT OF LABORATORY ANALYSIS

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Greensburg, PA 15601
(724)850-5600

QUALIFIERS

Project: WMWGADAP_1363
Pace Project No.: 30493174

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: For Safe Drinking Water Act (SDWA) analyses, the reported Unc. Is the calculated Count Uncertainty (95% confidence interval) using a coverage factor of 1.96. For all other matrices (non-SDWA), the reported Unc. is the calculated Expanded Uncertainty (aka Combined Standard Uncertainty, CSU), reported at the 95% confidence interval using a coverage factor of 1.96.

Gamma Spec: The Unc. reported for all gamma-spectroscopy analyses (EPA 901.1), is the calculated Expanded Uncertainty (CSU) at the 95.4% confidence interval, using a coverage factor of 2.0.

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30493174001	BC09112 PZ-1	EPA 9315	510503		
30493174002	BC09112 PZ-1 MS	EPA 9315	510503		
30493174003	BC09112 PZ-1 MSD	EPA 9315	510503		
30493174004	BC09113 MW-5	EPA 9315	510503		
30493174005	BC09114 PZ-2	EPA 9315	510503		
30493174006	BC09115 FB-1	EPA 9315	510503		
30493174007	BC09116 MW-6	EPA 9315	510503		
30493174008	BC09117 MW-6 Dup	EPA 9315	510503		
30493174009	BC09118 MW-7	EPA 9315	510503		
30493174010	BC09119 MW-10	EPA 9315	510503		
30493174011	BC09120 MW-12	EPA 9315	510503		
30493174012	BC09121 MW-4V	EPA 9315	510505		
30493174013	BC09122 MW-17	EPA 9315	510505		
30493174014	BC09123 MW-14	EPA 9315	510505		
30493174015	BC09124 MW-1	EPA 9315	510505		
30493174016	BC09125 MW-1 Dup	EPA 9315	510505		
30493174017	BC09126 MW-18H	EPA 9315	510505		
30493174018	BC09126 MW-18H MS	EPA 9315	510505		
30493174019	BC09126 MW-18H MSD	EPA 9315	510505		
30493174020	BC09127 PZ-5	EPA 9315	510505		
30493174021	BC09128 PZ-6	EPA 9315	510505		
30493174022	BC09129 MW-3	EPA 9315	510505		
30493174023	BC09130 MW-8	EPA 9315	510505		
30493174024	BC09131 MW-9	EPA 9315	510505		
30493174025	BC09626 MW-2	EPA 9315	510505		
30493174026	BC09627 FB-3	EPA 9315	510505		
30493174027	BC09628 MW-4	EPA 9315	510505		
30493174028	BC09629 MW-2VA	EPA 9315	510505		
30493174029	BC09630 MW-19H	EPA 9315	510505		
30493174030	BC09631 MW-19H Dup	EPA 9315	510505		
30493174031	BC09632 MW-21VC	EPA 9315	510505		
30493174032	BC09633 MW-20H	EPA 9315	510507		
30493174033	BC09634 EB-1	EPA 9315	510507		
30493174034	BC09635 EB-2	EPA 9315	510507		
30493174035	BC09636 MW-2VB	EPA 9315	510507		
30493174036	BC09637 MW-16	EPA 9315	510507		
30493174037	BC09638 MW-11	EPA 9315	510507		
30493174038	BC09639 MW-22VB	EPA 9315	510507		
30493174039	BC09640 FB-2	EPA 9315	510507		
30493174001	BC09112 PZ-1	EPA 9320	510502		
30493174002	BC09112 PZ-1 MS	EPA 9320	510502		
30493174003	BC09112 PZ-1 MSD	EPA 9320	510502		
30493174004	BC09113 MW-5	EPA 9320	510502		
30493174005	BC09114 PZ-2	EPA 9320	510502		
30493174006	BC09115 FB-1	EPA 9320	510502		
30493174007	BC09116 MW-6	EPA 9320	510502		
30493174008	BC09117 MW-6 Dup	EPA 9320	510502		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30493174009	**BC09118 MW-7**	EPA 9320	510502		
30493174010	**BC09119 MW-10**	EPA 9320	510502		
30493174011	**BC09120 MW-12**	EPA 9320	510502		
30493174012	**BC09121 MW-4V**	EPA 9320	510504		
30493174013	**BC09122 MW-17**	EPA 9320	510504		
30493174014	**BC09123 MW-14**	EPA 9320	510504		
30493174015	**BC09124 MW-1**	EPA 9320	510504		
30493174016	**BC09125 MW-1 Dup**	EPA 9320	510504		
30493174017	**BC09126 MW-18H**	EPA 9320	510504		
30493174018	**BC09126 MW-18H MS**	EPA 9320	510504		
30493174019	**BC09126 MW-18H MSD**	EPA 9320	510504		
30493174020	**BC09127 PZ-5**	EPA 9320	510504		
30493174021	**BC09128 PZ-6**	EPA 9320	510504		
30493174022	**BC09129 MW-3**	EPA 9320	510504		
30493174023	**BC09130 MW-8**	EPA 9320	510504		
30493174024	**BC09131 MW-9**	EPA 9320	510504		
30493174025	**BC09626 MW-2**	EPA 9320	510504		
30493174026	**BC09627 FB-3**	EPA 9320	510504		
30493174027	**BC09628 MW-4**	EPA 9320	510504		
30493174028	**BC09629 MW-2VA**	EPA 9320	510504		
30493174029	**BC09630 MW-19H**	EPA 9320	510504		
30493174030	**BC09631 MW-19H Dup**	EPA 9320	510504		
30493174031	**BC09632 MW-21VC**	EPA 9320	510504		
30493174032	**BC09633 MW-20H**	EPA 9320	510506		
30493174033	**BC09634 EB-1**	EPA 9320	510506		
30493174034	**BC09635 EB-2**	EPA 9320	510506		
30493174035	**BC09636 MW-2VB**	EPA 9320	510506		
30493174036	**BC09637 MW-16**	EPA 9320	510506		
30493174037	**BC09638 MW-11**	EPA 9320	510506		
30493174038	**BC09639 MW-22VB**	EPA 9320	510506		
30493174039	**BC09640 FB-2**	EPA 9320	510506		
30493174001	**BC09112 PZ-1**	Total Radium Calculation	517870		
30493174004	**BC09113 MW-5**	Total Radium Calculation	517870		
30493174005	**BC09114 PZ-2**	Total Radium Calculation	517870		
30493174006	**BC09115 FB-1**	Total Radium Calculation	517870		
30493174007	**BC09116 MW-6**	Total Radium Calculation	517870		
30493174008	**BC09117 MW-6 Dup**	Total Radium Calculation	517870		
30493174009	**BC09118 MW-7**	Total Radium Calculation	517870		
30493174010	**BC09119 MW-10**	Total Radium Calculation	517870		
30493174011	**BC09120 MW-12**	Total Radium Calculation	517870		
30493174012	**BC09121 MW-4V**	Total Radium Calculation	517871		
30493174013	**BC09122 MW-17**	Total Radium Calculation	517871		
30493174014	**BC09123 MW-14**	Total Radium Calculation	517871		
30493174015	**BC09124 MW-1**	Total Radium Calculation	517871		
30493174016	**BC09125 MW-1 Dup**	Total Radium Calculation	517871		
30493174017	**BC09126 MW-18H**	Total Radium Calculation	517871		
30493174020	**BC09127 PZ-5**	Total Radium Calculation	517871		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGADAP_1363
Pace Project No.: 30493174

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30493174021	**BC09128 PZ-6**	Total Radium Calculation	517871		
30493174022	**BC09129 MW-3**	Total Radium Calculation	517871		
30493174023	**BC09130 MW-8**	Total Radium Calculation	517871		
30493174024	**BC09131 MW-9**	Total Radium Calculation	517871		
30493174025	**BC09626 MW-2**	Total Radium Calculation	517871		
30493174026	**BC09627 FB-3**	Total Radium Calculation	517871		
30493174027	**BC09628 MW-4**	Total Radium Calculation	517871		
30493174028	**BC09629 MW-2VA**	Total Radium Calculation	517871		
30493174029	**BC09630 MW-19H**	Total Radium Calculation	517871		
30493174030	**BC09631 MW-19H Dup**	Total Radium Calculation	517871		
30493174031	**BC09632 MW-21VC**	Total Radium Calculation	517871		
30493174032	**BC09633 MW-20H**	Total Radium Calculation	517872		
30493174033	**BC09634 EB-1**	Total Radium Calculation	517872		
30493174034	**BC09635 EB-2**	Total Radium Calculation	517872		
30493174035	**BC09636 MW-2VB**	Total Radium Calculation	517872		
30493174036	**BC09637 MW-16**	Total Radium Calculation	517872		
30493174037	**BC09638 MW-11**	Total Radium Calculation	517872		
30493174038	**BC09639 MW-22VB**	Total Radium Calculation	517872		
30493174039	**BC09640 FB-2**	Total Radium Calculation	517872		

WO# : 30493174

30493174

CHAIN-OF ...**nt**

The Chain-of-Cu... ...leted accurately.

Page : 1 Of 5

Section A Required Client Information:		Section B Required Project Information:		Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Skyler Richmond
Requested Due Date:	28 days	Project Number:	WMWGADAP_1363	Pace Profile #:	16788

Regulatory Agency
State / Location: AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Requested Analysis Filtered (Y/N)	Preservatives: Unpreserved	H2SO4	HNO3			Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum			Residual Chlorine (Y/N)	
1	BC09112	PZ-1	APCO-GSD-AP-PZ-1	APCO_Plant_Gadsden_AshPond		x		GW	G	5/9/2022	12:56	3				X				X	X	X				002, 003
2	BC09113	MW-5	APCO-GSD-AP-MW-5	APCO_Plant_Gadsden_AshPond				GW	G	5/9/2022	14:28	1				X				X	X	X				004
3	BC09114	PZ-2	APCO-GSD-AP-PZ-2	APCO_Plant_Gadsden_AshPond				GW	G	5/9/2022	15:33	1				X				X	X	X				005
4	BC09115	FB-1	APCO-GSD-AP-FB-01	APCO_Plant_Gadsden_AshPond				GW	G	5/9/2022	16:00	1				X				X	X	X				006
5	BC09116	MW-6	APCO-GSD-AP-MW-6	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	9:33	1				X				X	X	X				007
6	BC09117	MW-6 Dup	APCO-GSD-AP-MW-6	APCO_Plant_Gadsden_AshPond	x			GW	G	5/10/2022	9:33	1				X				X	X	X				008
7	BC09118	MW-7	APCO-GSD-AP-MW-7	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	10:38	1				X				X	X	X				009
8	BC09119	MW-10	APCO-GSD-AP-MW-10	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	12:05	1				X				X	X	X				010
9	BC09120	MW-12	APCO-GSD-AP-MW-12	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	13:17	1				X				X	X	X				011
10	BC09121	MW-4V	APCO-GSD-AP-MW-4V	APCO_Plant_Gadsden_AshPond				GW	G	5/11/2022	9:11	1				x				x	x	x				012
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	5/19/2022	10:19		5/23/22	1045	NA	N	Y	Y

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:	Dallas Gentry			
SIGNATURE of SAMPLER:	DATE Signed:	TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30493174

PM: SCR Due Date: 06/14/22
CLIENT: ALABAMA PWR

CHAIN-OF-CUSTODY / Analytical Reque

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fiel

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Skyler Richmond
Requested Due Date:	28 days	Project Number:	WMWGADAP_1363	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3			Y/N Analyses Test: EPA 9315	EPA 9320	Total Radium Sum			Residual Chlorine (Y/N)	
1	BC09122	MW-17	APCO-GSD-AP-MW-17	APCO_Plant_Gadsden_AshPond				GW	G	5/9/2022	13:40	1			X			X	X	X				013
2	BC09123	MW-14	APCO-GSD-AP-MW-14	APCO_Plant_Gadsden_AshPond				GW	G	5/9/2022	15:37	1			X			X	X	X				014
3	BC09124	MW-1	APCO-GSD-AP-MW-1	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	8:35	1			X			X	X	X				015
4	BC09125	MW-1 Dup	APCO-GSD-AP-MW-1	APCO_Plant_Gadsden_AshPond	x			GW	G	5/10/2022	8:35	1			X			X	X	X				016
5	BC09126	MW-18H	APCO-GSD-AP-MW-18H	APCO_Plant_Gadsden_AshPond		x		GW	G	5/10/2022	9:53	3			X			X	X	X				017,018,019
6	BC09127	PZ-5	APCO-GSD-AP-PZ-5	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	11:05	1			X			X	X	X				020
7	BC09128	PZ-6	APCO-GSD-AP-PZ-6	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	12:18	1			X			X	X	X				021
8	BC09129	MW-3	APCO-GSD-AP-MW-3	APCO_Plant_Gadsden_AshPond				GW	G	5/10/2022	13:25	1			X			X	X	X				022
9	BC09130	MW-8	APCO-GSD-AP-MW-8	APCO_Plant_Gadsden_AshPond				GW	G	5/11/2022	8:40	1			X			X	X	X				023
10	BC09131	MW-9	APCO-GSD-AP-MW-9	APCO_Plant_Gadsden_AshPond				GW	G	5/11/2022	10:12	1			x			x	x	x				024
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	5/19/2022	10:19	[signature]	5/23/22	1045	NA	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TJ Daugherty

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Skyler Richmond
Requested Due Date:	28 days	Project Number:	WMWGADAP_1363	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3			Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum			Residual Chlorine (Y/N)	
1	BC09626	MW-2	APCO-GSD-AP-MW-2	APCO_Plant_Gadsden_AshPond				GW	G	5/16/2022	12:05	1			X				X	X	X				025
2	BC09627	FB-3	APCO-GSD-AP-FB-03	APCO_Plant_Gadsden_AshPond				GW	G	5/16/2022	14:40	1			X				X	X	X				026
3	BC09628	MW-4	APCO-GSD-AP-MW-4	APCO_Plant_Gadsden_AshPond				GW	G	5/16/2022	14:45	1			X				X	X	X				027
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	5/19/2022	10:19	[signature]	5/23/22	1045	NA	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Anthony Goggins

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

3049374

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Skyler Richmond
Requested Due Date:	28 days	Project Number:	WMWGADAP_1363	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3			Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum			Residual Chlorine (Y/N)	
1	BC09629	MW-2VA	APCO-GSD-AP-MW-2VA	APCO_Plant_Gadsden_AshPond				GW	G	5/16/2022	11:08	1			X				X	X	X				028
2	BC09630	MW-19H	APCO-GSD-AP-MW-19H	APCO_Plant_Gadsden_AshPond				GW	G	5/16/2022	14:09	1			X				X	X	X				029
3	BC09631	MW-19H Dup	APCO-GSD-AP-MW-19H	APCO_Plant_Gadsden_AshPond	x			GW	G	5/16/2022	14:09	1			X				X	X	X				030
4	BC09632	MW-21VC	APCO-GSD-AP-MW-21VC	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	9:56	1			X				X	X	X				031
5	BC09633	MW-20H	APCO-GSD-AP-MW-20H	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	11:58	1			X				X	X	X				032
6	BC09634	EB-1	APCO-GSD-AP-EB-01	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	12:30	1			X				X	X	X				033
7	BC09635	EB-2	APCO-GSD-AP-EB-02	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	12:45	1			X				X	X	X				034
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	5/19/2022	10:19	[signature]	5/23/22	1045	NA	N	4	4

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Dallas Gentry

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

30493174

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 5 Of 5

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Brooke Caton	Attention:	Brooke Caton
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6101 Fax:	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Skyler Richmond
Requested Due Date:	28 days	Project Number:	WMWGADAP_1363	Pace Profile #:	16788

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	Description	Station Name Location_ID	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3			Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum			Residual Chlorine (Y/N)	
1	BC09636	MW-2VB	APCO-GSD-AP-MW-2VB	APCO_Plant_Gadsden_AshPond				GW	G	5/16/2022	11:58	1			X				X	X	X				035
2	BC09637	MW-16	APCO-GSD-AP-MW-16	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	6:50	1			X				X	X	X				036
3	BC09638	MW-11	APCO-GSD-AP-MW-11	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	8:15	1			X				X	X	X				037
4	BC09639	MW-22VB	APCO-GSD-AP-MW-22VB	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	9:18	1			X				X	X	X				038
5	BC09640	FB-2	APCO-GSD-AP-FB-02	APCO_Plant_Gadsden_AshPond				GW	G	5/17/2022	9:45	1			X				X	X	X				039
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Brooke Caton/ APC GTL	5/19/2022	10:19	Kelly Robb	5/23/22	1045	NA	N	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: TJ Daugherty

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Alabama Power Project # 30493174

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Label MIS
LIMS Login VP

Tracking #: 5701 6585 3164

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Thermometer Used NA Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp NA °C Correction Factor: NA °C Final Temp: NA °C

Temp should be above freezing to 6°C

pH paper Lot# 0104611 Date and Initials of person examining contents: SAM 5/31/22

Comments:	Yes	No	N/A	
Chain of Custody Present:	✓			1.
Chain of Custody Filled Out:	✓			2.
Chain of Custody Relinquished:	✓			3.
Sampler Name & Signature on COC:		✓		4.
Sample Labels match COC:	✓			5.
-Includes date/time/ID Matrix: WT				
Samples Arrived within Hold Time:	✓			6.
Short Hold Time Analysis (<72hr remaining):		✓		7.
Rush Turn Around Time Requested:		✓		8.
Sufficient Volume:	✓			9.
Correct Containers Used:	✓			10.
-Pace Containers Used:	✓			
Containers Intact:	✓			11.
Orthophosphate field filtered			✓	12.
Hex Cr Aqueous sample field filtered			✓	13.
Organic Samples checked for dechlorination:			✓	14.
Filtered volume received for Dissolved tests			✓	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	✓			16. pH <2
All containers meet method preservation requirements.	✓			Initial when completed SAM Date/time of preservation
				Lot # of added preservative
Headspace in VOA Vials (>6mm):			✓	17.
Trip Blank Present:			✓	18.
Trip Blank Custody Seals Present			✓	
Rad Samples Screened < 0.5 mrem/hr	✓			Initial when completed: SAM Date: 5/31/22 Survey Meter SN: 1563

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	6/18/2022
Worklist:	67110
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2474493
MB concentration:	0.000
M/B Counting Uncertainty:	0.085
MB MDC:	0.228
MB Numerical Performance Indicator:	0.00
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS67110	LCSD67110
Count Date:	7/8/2022	7/8/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026	24.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.503	0.509
Target Conc. (pCi/L, g, F):	4.773	4.717
Uncertainty (Calculated):	0.057	0.057
Result (pCi/L, g, F):	5.036	4.446
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.337	0.309
Numerical Performance Indicator:	1.50	-1.69
Percent Recovery:	105.50%	94.24%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/10/2022	5/9/2022
Sample I.D.	30489569003	30493174001
Sample MS I.D.	30489569004	30493174002
Sample MSD I.D.	30489569005	30493174003
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.027	24.027
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.304	0.306
MS Target Conc.(pCi/L, g, F):	15.814	15.699
MSD Aliquot (L, g, F):	0.323	0.292
MSD Target Conc. (pCi/L, g, F):	14.865	16.451
MS Spike Uncertainty (calculated):	0.190	0.188
MSD Spike Uncertainty (calculated):	0.178	0.197
Sample Result:	0.187	0.069
Sample Result Counting Uncertainty (pCi/L, g, F):	0.171	0.121
Sample Matrix Spike Result:	15.225	15.841
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.765	1.102
Sample Matrix Spike Duplicate Result:	13.951	17.415
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.712	1.181
MS Numerical Performance Indicator:	-1.885	0.127
MSD Numerical Performance Indicator:	-2.862	1.457
MS Percent Recovery:	95.09%	100.46%
MSD Percent Recovery:	92.60%	105.44%
MS Status vs Numerical Indicator:	N/A	N/A
MSD Status vs Numerical Indicator:	N/A	N/A
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	125%	125%
MS/MSD Lower % Recovery Limits:	75%	75%

Duplicate Sample Assessment		
Sample I.D.:	LCS67110	
Duplicate Sample I.D.	LCSD67110	
Sample Result (pCi/L, g, F):	5.036	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.337	
Sample Duplicate Result (pCi/L, g, F):	4.446	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.309	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.527	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	11.27%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30489569003	30493174001
Sample MS I.D.	30489569004	30493174002
Sample MSD I.D.	30489569005	30493174003
Sample Matrix Spike Result:	15.225	15.841
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	0.765	1.102
Sample Matrix Spike Duplicate Result:	13.951	17.415
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.712	1.181
Duplicate Numerical Performance Indicator:	2.388	-1.910
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	2.66%	4.83%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	N/A
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	25%	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	6/16/2022
Worklist:	67109
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2474491
MB concentration:	0.619
M/B 2 Sigma CSU:	0.362
MB MDC:	0.653
MB Numerical Performance Indicator:	3.35
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS67109	LCSD67109
Count Date:	6/29/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.215	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.803	
Target Conc. (pCi/L, g, F):	4.385	
Uncertainty (Calculated):	0.215	
Result (pCi/L, g, F):	4.082	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.968	
Numerical Performance Indicator:	-0.60	
Percent Recovery:	93.11%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/10/2022	5/9/2022
Sample I.D.	30489569003	30493174001
Sample MS I.D.	30489569004	30493174002
Sample MSD I.D.	30489569005	30493174003
Spike I.D.:	22-016	22-016
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	35.801	35.801
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.801	0.803
MS Target Conc.(pCi/L, g, F):	8.938	8.921
MSD Aliquot (L, g, F):	0.804	0.801
MSD Target Conc. (pCi/L, g, F):	8.907	8.938
MS Spike Uncertainty (calculated):	0.438	0.437
MSD Spike Uncertainty (calculated):	0.436	0.438
Sample Result:	0.838	0.715
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.443	0.379
Sample Matrix Spike Result:	10.638	8.937
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.123	1.805
Sample Matrix Spike Duplicate Result:	8.922	9.793
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.823	1.967
MS Numerical Performance Indicator:	0.763	-0.722
MSD Numerical Performance Indicator:	-0.838	0.135
MS Percent Recovery:	109.64%	92.17%
MSD Percent Recovery:	90.75%	101.58%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30489569003	30493174001
Sample MS I.D.	30489569004	30493174002
Sample MSD I.D.	30489569005	30493174003
Sample Matrix Spike Result:	10.638	8.937
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.123	1.805
Sample Matrix Spike Duplicate Result:	8.922	9.793
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.823	1.967
Duplicate Numerical Performance Indicator:	1.202	-0.629
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	18.85%	9.71%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*~~If the lowest activity sample in this batch is greater than ten times the blank value, the blank is acceptable; otherwise this batch must be re-prepped.~~
MB activity < MDC, Pass (JH 6/30/22

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: VAL
Date: 6/16/2022
Worklist: 67111
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2474496
MB concentration:	0.141
M/B 2 Sigma CSU:	0.249
MB MDC:	0.545
MB Numerical Performance Indicator:	1.11
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS67111	LCSD67111
Count Date:	6/28/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.227	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	4.400	
Uncertainty (Calculated):	0.216	
Result (pCi/L, g, F):	4.189	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.954	
Numerical Performance Indicator:	-0.42	
Percent Recovery:	95.21%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/10/2022	
Sample I.D.	30493174017	
Sample MS I.D.	30493174018	
Sample MSD I.D.	30493174019	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	35.803	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.803	
MS Target Conc.(pCi/L, g, F):	8.913	
MSD Aliquot (L, g, F):	0.809	
MSD Target Conc. (pCi/L, g, F):	8.850	
MS Spike Uncertainty (calculated):	0.437	
MSD Spike Uncertainty (calculated):	0.434	
Sample Result:	0.334	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.331	
Sample Matrix Spike Result:	9.250	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.876	
Sample Matrix Spike Duplicate Result:	8.680	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.738	
MS Numerical Performance Indicator:	0.003	
MSD Numerical Performance Indicator:	-0.542	
MS Percent Recovery:	100.04%	
MSD Percent Recovery:	94.31%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	30493174017
Sample MS I.D.	30493174018
Sample MSD I.D.	30493174019
Sample Matrix Spike Result:	9.250
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.876
Sample Matrix Spike Duplicate Result:	8.680
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.738
Duplicate Numerical Performance Indicator:	0.437
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	5.90%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

6/16/2022

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	VAL
Date:	6/18/2022
Worklist:	67112
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2474497
MB concentration:	0.014
M/B Counting Uncertainty:	0.097
MB MDC:	0.249
MB Numerical Performance Indicator:	0.29
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS67112	LCSD67112
Count Date:	7/8/2022	7/8/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026	24.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.512	0.501
Target Conc. (pCi/L, g, F):	4.690	4.795
Uncertainty (Calculated):	0.056	0.058
Result (pCi/L, g, F):	5.020	4.790
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.465	0.454
Numerical Performance Indicator:	1.38	-0.02
Percent Recovery:	107.02%	99.90%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/10/2022	
Sample I.D.	30493174017	
Sample MS I.D.	30493174018	
Sample MSD I.D.	30493174019	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.027	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.278	
MS Target Conc.(pCi/L, g, F):	17.255	
MSD Aliquot (L, g, F):	0.276	
MSD Target Conc. (pCi/L, g, F):	17.417	
MS Spike Uncertainty (calculated):	0.207	
MSD Spike Uncertainty (calculated):	0.209	
Sample Result:	0.242	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.184	
Sample Matrix Spike Result:	17.811	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.222	
Sample Matrix Spike Duplicate Result:	16.591	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.196	
MS Numerical Performance Indicator:	0.490	
MSD Numerical Performance Indicator:	-1.704	
MS Percent Recovery:	101.82%	
MSD Percent Recovery:	93.87%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS67112	
Duplicate Sample I.D.	LCSD67112	
Sample Result (pCi/L, g, F):	5.020	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.465	
Sample Duplicate Result (pCi/L, g, F):	4.790	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.454	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	0.693	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	6.88%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30493174017	
Sample MS I.D.	30493174018	
Sample MSD I.D.	30493174019	
Sample Matrix Spike Result:	17.811	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.222	
Sample Matrix Spike Duplicate Result:	16.591	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.196	
Duplicate Numerical Performance Indicator:	1.398	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	8.12%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

7/11/22

7/11/22

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	6/17/2022
Worklist:	67113
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2474498
MB concentration:	0.049
M/B 2 Sigma CSU:	0.230
MB MDC:	0.530
MB Numerical Performance Indicator:	0.42
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS67113	LCSD67113
Count Date:	7/7/2022	
Spike I.D.:	22-016	
Decay Corrected Spike Concentration (pCi/mL):	35.124	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.810	
Target Conc. (pCi/L, g, F):	4.337	
Uncertainty (Calculated):	0.212	
Result (pCi/L, g, F):	3.939	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	0.912	
Numerical Performance Indicator:	-0.83	
Percent Recovery:	90.82%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/23/2022	
Sample I.D.	30494074002	
Sample MS I.D.	30494074003	
Sample MSD I.D.	30494074004	
Spike I.D.:	22-016	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	35.647	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.806	
MS Target Conc.(pCi/L, g, F):	8.845	
MSD Aliquot (L, g, F):	0.806	
MSD Target Conc. (pCi/L, g, F):	8.842	
MS Spike Uncertainty (calculated):	0.433	
MSD Spike Uncertainty (calculated):	0.433	
Sample Result:	0.684	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.391	
Sample Matrix Spike Result:	10.182	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.021	
Sample Matrix Spike Duplicate Result:	8.817	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.765	
MS Numerical Performance Indicator:	0.608	
MSD Numerical Performance Indicator:	-0.747	
MS Percent Recovery:	107.38%	
MSD Percent Recovery:	91.99%	
MS Status vs Numerical Indicator:	Pass	
MSD Status vs Numerical Indicator:	Pass	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30494074002	
Sample MS I.D.	30494074003	
Sample MSD I.D.	30494074004	
Sample Matrix Spike Result:	10.182	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.021	
Sample Matrix Spike Duplicate Result:	8.817	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.765	
Duplicate Numerical Performance Indicator:	0.997	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	15.43%	
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	36%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

CWM 7/12/22

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	JC2
Date:	6/18/2022
Worklist:	67114
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2474499
MB concentration:	0.024
M/B Counting Uncertainty:	0.055
MB MDC:	0.132
MB Numerical Performance Indicator:	0.84
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS67114	LCSD67114
Count Date:	7/8/2022	7/8/2022
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.026	24.026
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.500
Target Conc. (pCi/L, g, F):	4.805	4.803
Uncertainty (Calculated):	0.058	0.058
Result (pCi/L, g, F):	5.124	4.232
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.477	0.428
Numerical Performance Indicator:	1.30	-2.60
Percent Recovery:	106.64%	88.10%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	5/23/2022	
Sample I.D.	30494074002	
Sample MS I.D.	30494074003	
Sample MSD I.D.	30494074004	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.027	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.309	
MS Target Conc.(pCi/L, g, F):	15.534	
MSD Aliquot (L, g, F):	0.290	
MSD Target Conc. (pCi/L, g, F):	16.556	
MS Spike Uncertainty (calculated):	0.186	
MSD Spike Uncertainty (calculated):	0.199	
Sample Result:	0.449	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.208	
Sample Matrix Spike Result:	15.705	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.120	
Sample Matrix Spike Duplicate Result:	17.374	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.142	
MS Numerical Performance Indicator:	-0.471	
MSD Numerical Performance Indicator:	0.614	
MS Percent Recovery:	98.21%	
MSD Percent Recovery:	102.23%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS67114	
Duplicate Sample I.D.	LCSD67114	
Sample Result (pCi/L, g, F):	5.124	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.477	
Sample Duplicate Result (pCi/L, g, F):	4.232	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.428	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	2.728	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	19.04%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	30494074002	
Sample MS I.D.	30494074003	
Sample MSD I.D.	30494074004	
Sample Matrix Spike Result:	15.705	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.120	
Sample Matrix Spike Duplicate Result:	17.374	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.142	
Duplicate Numerical Performance Indicator:	-2.045	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	4.01%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

7/11/22

7/11/22

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Plant Gadsden Ash Pond

2022 Additional Request Event 1

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGADAP_1365

Project/Site : Gadsden Ash Pond
Gadsden, AL 35903

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Brooke Caton
tbwill@southernco.com
(205) 664-6101

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

June 15, 2022

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on May 19, 2022.
All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Brooke Caton

Digitally signed by Brooke Caton
Date: 2022.06.15 11:00:28 -05'00'

Supervision: T Durant Maske

Digitally signed by T Durant Maske
DN: cn=T Durant Maske gn=T Durant Maske c=US United States l=US United States e=tdmaske@southernco.com
Reason: I am approving this document
Location:
Date: 2022-06-15 11:31:05-05:00

REPORT OF LABORATORY ANALYSIS

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Mercury

Gadsden Ash Pond

WMWGADAP_1365

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09649	726593	WMWGADAP_1365
BC09650	726593	WMWGADAP_1365
BC09651	726593	WMWGADAP_1365
BC09652	726593	WMWGADAP_1365

4. All of the above samples were analyzed and prepared by EPA 245.1 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were digested and analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for accuracy were met.

- A matrix spike and matrix spike duplicate were digested and analyzed with each analytical batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Dissolved Solids

Gadsden Ash Pond

WMWGADAP_1365

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09649	726768	WMWGADAP_1365
BC09650	726768	WMWGADAP_1365
BC09651	726768	WMWGADAP_1365
BC09652	726768	WMWGADAP_1365

4. All of the above samples were prepared and analyzed by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch, and RPD was ≤10%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Gadsden Ash Pond

WMWGADAP_1365

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09649	727671,727672	WMWGADAP_1365
BC09650	727671,727672	WMWGADAP_1365
BC09651	727671,727672	WMWGADAP_1365
BC09652	727671,727672	WMWGADAP_1365

4. All of the above samples were prepared and analyzed by Standard Method 2320B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BC09650

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Anions

Gadsden Ash Pond

WMWGADAP_1365

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09649	726883,726889,728611	WMWGADAP_1365
BC09650	726883,726889,728611	WMWGADAP_1365
BC09651	726883,726889,728611	WMWGADAP_1365
BC09652	726883,726889,728611	WMWGADAP_1365

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BC09650	Chloride, Fluoride	3,2
BC09651	Sulfate	4
BC09652	Sulfate	4

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Nitrate-Nitrite

Gadsden Ash Pond

WMWGADAP_1365

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09649	726657	WMWGADAP_1365
BC09650	726657	WMWGADAP_1365
BC09651	726657	WMWGADAP_1365
BC09652	726657	WMWGADAP_1365

4. All of the above samples were prepared and analyzed for NO_x by EPA 353.2.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Water baseline report was run and met criteria.
- All calibration met criteria for the requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- All continued calibration verification (CCV) were within the acceptance criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and were below limit of detection.
- All continued calibration blanks (CCB) were below the limit of detection.

EPA 353.2 Specific QC:

- Prior to sample analysis, Cadmium coil reduction efficiency check met criteria.
- Matrix Specific QC:
    - A sample duplicate was run and criteria for precision was met.
    - A matrix spike was run and criteria for accuracy was met, except for the following:
        - BC09652 MS recovery was outside of the specification limits.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Organic Carbon

Gadsden Ash Pond

WMWGADAP_1365

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BC09649	726765	WMWGADAP_1365
BC09650	726765	WMWGADAP_1365
BC09651	726765	WMWGADAP_1365
BC09652	726765	WMWGADAP_1365

4. All of the above samples were prepared and analyzed by Standard Method 5310B.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration criteria were met.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and met all criteria.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was <1/2RL.
- All continued calibration verifications (CCVs) were within the acceptance range.
- All continued calibration blanks (CCBs) were <1/2RL.

Matrix Specific Quality Control Procedures:

- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution factor.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA DIS

Location Code: WMWGADAP
Collected: 5/16/22 11:08
Customer ID:
Submittal Date: 5/19/22 07:05

Laboratory ID Number: BC09649

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Dissolved by CVAA	5/19/22 13:03	5/19/22 19:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:43	5/19/22 16:43		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	307	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	316	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	297	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	9.68	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 02:50	5/21/22 02:50		1	1.04	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:43	5/20/22 09:43		1	6.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:45	5/20/22 14:45		1	2.59	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 10:07	6/7/22 10:07		1	0.723	mg/L	0.6	2	J
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	5/16/22 11:05	5/16/22 11:05			511.85	uS/cm			FA
pH	5/16/22 11:05	5/16/22 11:05			8.10	SU			FA
Temperature	5/16/22 11:05	5/16/22 11:05			21.28	C			FA
Turbidity	5/16/22 11:05	5/16/22 11:05			0.64	NTU			FA
Sulfide	5/16/22 11:05	5/16/22 11:05			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/15/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:08
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-2VA DIS

Laboratory ID Number: BC09649

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Chloride	mg/L	-0.142	1.00	10.0	18.7	18.6	10.6	9.00 to 11.0	105	80.0 to 120	0.536	20.0
BC09652	Fluoride	mg/L	-0.0765	0.125	2.50	2.85	2.89	2.59	2.25 to 2.75	107	80.0 to 120	1.39	20.0
BC09652	Mercury, Dissolved by	mg/L	0.00014	0.000500	0.004	0.00405	0.00406	0.00392	0.00340 to 0.00460	101	70.0 to 130	0.247	20.0
BC09652	Sulfate	mg/L	-0.236	2.0	80.0	143	132	18.3	18.0 to 22.0	117	80.0 to 120	8.00	20.0
BC09652	Total Organic Carbon	mg/L	0.296	1.00	10.0	11.7	11.7	10.2		100	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:08
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-2VA DIS

Laboratory ID Number: BC09649

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09652	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.87	0.173	1.96	1.80 to 2.20	83.5	90.0 to 110	14.5	15.0
BC09652	Solids, Dissolved	mg/L	1.00	25.0			201	49.0	40.0 to 60.0			8.11	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB DIS

Location Code: WMWGADAP
Collected: 5/16/22 11:58
Customer ID:
Submittal Date: 5/19/22 07:05

Laboratory ID Number: BC09650

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Dissolved by CVAA	5/19/22 13:03	5/19/22 19:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:44	5/19/22 16:44		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	436	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	508	mg/L		50	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	420	mg/L		1	A
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	16.1	mg/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 03:06	5/21/22 03:06		1	2.45	mg/L	1.00	2	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:51	5/20/22 09:51		3	38.8	mg/L	1.50	3	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:52	5/20/22 14:52		2	6.14	mg/L	0.12	0.25	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 10:08	6/7/22 10:08		1	7.94	mg/L	0.6	2	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	5/16/22 11:55	5/16/22 11:55			905.13	uS/cm			FA
pH	5/16/22 11:55	5/16/22 11:55			8.48	SU			FA
Temperature	5/16/22 11:55	5/16/22 11:55			20.60	C			FA
Turbidity	5/16/22 11:55	5/16/22 11:55			1.22	NTU			FA
Sulfide	5/16/22 11:55	5/16/22 11:55			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/15/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:58
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-2VB DIS

Laboratory ID Number: BC09650

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Chloride	mg/L	-0.142	1.00	10.0	18.7	18.6	10.6	9.00 to 11.0	105	80.0 to 120	0.536	20.0
BC09652	Fluoride	mg/L	-0.0765	0.125	2.50	2.85	2.89	2.59	2.25 to 2.75	107	80.0 to 120	1.39	20.0
BC09652	Mercury, Dissolved by	mg/L	0.00014	0.000500	0.004	0.00405	0.00406	0.00392	0.00340 to 0.00460	101	70.0 to 130	0.247	20.0
BC09652	Sulfate	mg/L	-0.236	2.0	80.0	143	132	18.3	18.0 to 22.0	117	80.0 to 120	8.00	20.0
BC09652	Total Organic Carbon	mg/L	0.296	1.00	10.0	11.7	11.7	10.2		100	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/15/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 11:58
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-2VB DIS

Laboratory ID Number: BC09650

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09652	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.87	0.173	1.96	1.80 to 2.20	83.5	90.0 to 110	14.5	15.0
BC09652	Solids, Dissolved	mg/L	1.00	25.0			201	49.0	40.0 to 60.0			8.11	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2 DIS

Location Code: WMWGADAP
Collected: 5/16/22 12:05
Customer ID:
Submittal Date: 5/19/22 07:05

Laboratory ID Number: BC09651

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Dissolved by CVAA	5/19/22 13:03	5/19/22 19:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:45	5/19/22 16:45		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	92.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	244	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	91.4	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	0.748	mg/L			
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 03:26	5/21/22 03:26		1	1.21	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:46	5/20/22 09:46		1	2.18	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:47	5/20/22 14:47		1	0.151	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 10:22	6/7/22 10:22		4	93.1	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/16/22 12:03	5/16/22 12:03			420.43	uS/cm			FA
pH	5/16/22 12:03	5/16/22 12:03			6.16	SU			FA
Temperature	5/16/22 12:03	5/16/22 12:03			17.67	C			FA
Turbidity	5/16/22 12:03	5/16/22 12:03			6.16	NTU			FA
Sulfide	5/16/22 12:03	5/16/22 12:03			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Reported: 6/15/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 12:05
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-2 DIS

Laboratory ID Number: BC09651

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Chloride	mg/L	-0.142	1.00	10.0	18.7	18.6	10.6	9.00 to 11.0	105	80.0 to 120	0.536	20.0
BC09652	Fluoride	mg/L	-0.0765	0.125	2.50	2.85	2.89	2.59	2.25 to 2.75	107	80.0 to 120	1.39	20.0
BC09652	Mercury, Dissolved by	mg/L	0.00014	0.000500	0.004	0.00405	0.00406	0.00392	0.00340 to 0.00460	101	70.0 to 130	0.247	20.0
BC09652	Sulfate	mg/L	-0.236	2.0	80.0	143	132	18.3	18.0 to 22.0	117	80.0 to 120	8.00	20.0
BC09652	Total Organic Carbon	mg/L	0.296	1.00	10.0	11.7	11.7	10.2		100	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 12:05
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-2 DIS

Laboratory ID Number: BC09651

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09652	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.87	0.173	1.96	1.80 to 2.20	83.5	90.0 to 110	14.5	15.0
BC09652	Solids, Dissolved	mg/L	1.00	25.0			201	49.0	40.0 to 60.0			8.11	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4 DIS

Location Code: WMWGADAP
Collected: 5/16/22 14:45
Customer ID:
Submittal Date: 5/19/22 07:05

Laboratory ID Number: BC09652

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Dissolved by CVAA	5/19/22 13:03	5/19/22 19:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: CES***								
* Nitrogen, Nitrate/Nitrite	5/19/22 16:45	5/19/22 16:45		1	0.200	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
Alkalinity, Total as CaCO3	5/27/22 10:12	5/27/22 12:57		1	109	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: JS***								
* Solids, Dissolved	5/20/22 13:27	5/23/22 13:55		1	218	mg/L		25	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
Bicarbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	109	mg/L			
Carbonate Alkalinity, (calc.)	5/27/22 10:12	5/27/22 12:57		1	Not Detected	mg/L		0.5	
Analytical Method: SM 5310 B	***Analyst: ELH***								
* Total Organic Carbon	5/21/22 03:43	5/21/22 03:43		1	1.69	mg/L	1.00	2	J
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	5/20/22 09:47	5/20/22 09:47		1	8.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	5/20/22 14:49	5/20/22 14:49		1	0.170	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	6/7/22 10:23	6/7/22 10:23		4	49.4	mg/L	2.4	8	
Analytical Method: Field Measurements	***Analyst: AWG***								
Conductivity	5/16/22 14:42	5/16/22 14:42			443.50	uS/cm			FA
pH	5/16/22 14:42	5/16/22 14:42			6.61	SU			FA
Temperature	5/16/22 14:42	5/16/22 14:42			18.15	C			FA
Turbidity	5/16/22 14:42	5/16/22 14:42			5.4	NTU			FA
Sulfide	5/16/22 14:42	5/16/22 14:42			0	mg/L			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 6/15/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:45
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-4 DIS

Laboratory ID Number: BC09652

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Chloride	mg/L	-0.142	1.00	10.0	18.7	18.6	10.6	9.00 to 11.0	105	80.0 to 120	0.536	20.0
BC09652	Fluoride	mg/L	-0.0765	0.125	2.50	2.85	2.89	2.59	2.25 to 2.75	107	80.0 to 120	1.39	20.0
BC09652	Mercury, Dissolved by	mg/L	0.00014	0.000500	0.004	0.00405	0.00406	0.00392	0.00340 to 0.00460	101	70.0 to 130	0.247	20.0
BC09652	Sulfate	mg/L	-0.236	2.0	80.0	143	132	18.3	18.0 to 22.0	117	80.0 to 120	8.00	20.0
BC09652	Total Organic Carbon	mg/L	0.296	1.00	10.0	11.7	11.7	10.2		100	80.0 to 120	0.00	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 6/15/2022
Version: 3.5
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 5/16/22 14:45
Customer ID:
Delivery Date: 5/19/22 07:05

Description: Gadsden Ash Pond - MW-4 DIS

Laboratory ID Number: BC09652

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BC09652	Alkalinity, Total as CaCO3	mg/L					103	50.5	45.0 to 55.0			5.66	10.0
BC09652	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.01	0.200	2.00	1.87	0.173	1.96	1.80 to 2.20	83.5	90.0 to 110	14.5	15.0
BC09652	Solids, Dissolved	mg/L	1.00	25.0			201	49.0	40.0 to 60.0			8.11	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Alabama Power

Project Number: WMWGADAP_1365

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
A	Bicarbonate alkalinity, carbonate alkalinity, hydroxide alkalinity, free carbon dioxide, and/or total carbon dioxide calculations are estimates due to pH>10SU and/or TDS>500mg/L.
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
	2	Nitrates/Nitrites, TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: Relinquished to GSC Building 8 Shipping lab. DFG 051822
NO2/NO3, TOC pH <2 SU 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2VB DIS	05/16/2022	11:58	5	Field Filtered		BC09650

Relinquished By	Received By	Date/Time
		05/17/2022 10:30
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:33:13 -05'00'	05/18/2022 09:23

SmarTroll ID	7586-41446-5-5	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	1.2 °C
Sample Event	1365	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
	2	Nitrate/Nitrite; TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: Relinquished to GSC Building 8 Shipping lab. DFG 051822
NO2/NO3, TOC pH <2 SU 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2VA DIS	05/16/2022	11:08	5	Field Filtered		BC09649

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 14:32:45 -05'00'	05/18/2022 09:24

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	1.3 °C
Sample Event	1365	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Anthony Goggins	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Hg	250 mL	3	TDS	500 mL	5	Alkalinity	250 mL	7	N/A	N/A
	2	Nitrite/Nitrate; TOC	250 mL	4	Anions	250 mL	6	N/A	N/A	8	N/A	N/A

Comments: Relinquish to Shipping Lab secure room @0855 051822 AWG; Additional Request NO2/NO3, TOC pH <2 SU 05182022 RJ

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-2 Dis	05/16/2022	12:05	5	Field Filtered		BC09651
MW-4 Dis	05/16/2022	14:45	5	Field Filtered		BC09652

Relinquished By	Received By	Date/Time
	Renee Jernigan Digitally signed by Renee Jernigan Date: 2022.05.18 15:01:13 -05'00'	05/18/2022 15:01

SmarTroll ID	7586-41442-5-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.9 °C
Sample Event	1365	Thermometer ID	7044-38281-2-1
		pH Strip ID	9772-56585-100-7

Bottles/Pre-Preserved Bottles are provided by the GTL

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Field Case Narrative

Plant Gadsden Ash Pond

2021 Compliance Event 2

All samples were collected using methods defined in Alabama Power's Water Field Group Low-Flow Groundwater Sampling Procedure and the associated site-specific Sampling and Analysis Plan (SAP).

Light rain was present when pumping and sampling wells MW-2VA & FB-2.

Field quality control procedures were performed as follows:

- Blanks and Sample Duplicates were collected as described in the SAP.
- Calibration verification for all required field parameters were performed daily, before and after sample collection.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
205-664-6001

Analytical Report

Alabama Power

Sample Group : WMWGADAP_1341

Project/Site : Gadsden Ash Pond
Gadsden, AL 35903

For : Southern Company Services
3535 Colonnade Parkway
Birmingham, AL 35243

Attention : Dustin Brooks & Greg Dyer

Released By : Laura Midkiff
lbmidkif@southernco.com
(205) 664-6197

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

November 19, 2021

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory between October 06, 2021 and October 13, 2021. All results reported herein conform to the laboratory's most current Quality Assurance Manual. Results marked with an asterisk conform to the most current applicable TNI/NELAC requirements. Exceptions will be noted in the body of the report.

Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2022

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Quality Control: Laura Midkiff
Digitally signed by Laura Midkiff
DN: cn=Laura Midkiff, o=Alabama Power Company, ou=Environmental Affairs, email=lbmidkif@southernco.com, c=US
Date: 2021.11.19 13:36:15 -06'00'

Supervision: T. Durant Maske
Digitally signed by T. Durant Maske
DN: cn=T. Durant Maske, o=Alabama Power Company, ou=Environmental Affairs, email=tdmaske@southernco.com, c=US
Date: 2021.11.19 15:08:23 -06'00'

REPORT OF LABORATORY ANALYSIS

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICP

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710248	WMWGADAP_1341
BB18669	710248	WMWGADAP_1341
BB18670	710248	WMWGADAP_1341
BB18671	710248	WMWGADAP_1341
BB18672	710248	WMWGADAP_1341
BB18673	710248	WMWGADAP_1341
BB18674	710248	WMWGADAP_1341
BB18675	710248	WMWGADAP_1341
BB18737	710248	WMWGADAP_1341
BB18738	710248	WMWGADAP_1341
BB18739	710249	WMWGADAP_1341
BB18740	710249	WMWGADAP_1341
BB18741	710249	WMWGADAP_1341
BB18742	710249	WMWGADAP_1341
BB18743	710249	WMWGADAP_1341
BB18744	710249	WMWGADAP_1341
BB18745	710249	WMWGADAP_1341
BB18746	710249	WMWGADAP_1341
BB18995	711002	WMWGADAP_1341
BB18996	711002	WMWGADAP_1341
BB18997	711002	WMWGADAP_1341
BB18998	711002	WMWGADAP_1341
BB18999	711002	WMWGADAP_1341
BB19000	711002	WMWGADAP_1341
BB19001	711002	WMWGADAP_1341
BB19002	711002	WMWGADAP_1341
BB19003	711002	WMWGADAP_1341
BB19004	711002	WMWGADAP_1341
BB19005	711003	WMWGADAP_1341
BB19006	711003	WMWGADAP_1341
BB19007	711003	WMWGADAP_1341

BB19008	711003	WMWGADAP_1341
BB19009	711003	WMWGADAP_1341
BB19010	711003	WMWGADAP_1341
BB19011	711003	WMWGADAP_1341

4. All of the above samples were analyzed by EPA 200.7 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BB18670	Calcium	10.15
BB18671	Iron	101.5
BB18672	Iron	101.5
BB18741	Calcium	10.15
BB18742	Calcium & Magnesium	10.15
BB18744	Sodium	101.5
BB18745	Sodium	101.5
BB18995	Sodium	10.15
BB18997	Calcium & Iron	10.15
BB18999	Sodium	101.5
BB19003	Sodium	10.15
BB19004	Calcium	10.15
BB19005	Iron	10.15
BB19008	Calcium & Iron	10.15
BB19010	Calcium & Iron	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICP

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710212	WMWGADAP_1341
BB18669	710212	WMWGADAP_1341
BB18670	710212	WMWGADAP_1341
BB18671	710212	WMWGADAP_1341
BB18672	710212	WMWGADAP_1341
BB18674	710212	WMWGADAP_1341
BB18675	710212	WMWGADAP_1341
BB18738	710212	WMWGADAP_1341
BB18739	710212	WMWGADAP_1341
BB18740	710212	WMWGADAP_1341
BB18741	710213	WMWGADAP_1341
BB18742	710213	WMWGADAP_1341
BB18743	710213	WMWGADAP_1341
BB18744	710213	WMWGADAP_1341
BB18745	710213	WMWGADAP_1341
BB18995	710932	WMWGADAP_1341
BB18996	710932	WMWGADAP_1341
BB18997	710932	WMWGADAP_1341
BB18999	710932	WMWGADAP_1341
BB19000	710932	WMWGADAP_1341
BB19001	710932	WMWGADAP_1341
BB19002	710932	WMWGADAP_1341
BB19003	710932	WMWGADAP_1341
BB19004	710932	WMWGADAP_1341
BB19005	710932	WMWGADAP_1341
BB19006	710933	WMWGADAP_1341
BB19007	710933	WMWGADAP_1341
BB19008	710933	WMWGADAP_1341
BB19009	710933	WMWGADAP_1341
BB19010	710933	WMWGADAP_1341

4. All of the above samples were analyzed and prepared by EPA 200.7 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each batch passed all acceptance criteria for all requested analytes.
- All calibration curve requirements were within acceptance criteria.
- All sample internal standard criteria were met.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for accuracy were met, except for the following:
    - BB19005 and BB19010 Iron MS/MSD spike levels were <30% of the sample concentrations.
- A matrix spike and matrix spike duplicate were analyzed with each ICP batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BB18671	Iron	101.5
BB18672	Iron	101.5
BB18997	Iron	10.15
BB19005	Iron	10.15
BB19008	Iron	10.15
BB19010	Iron	10.15

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Total Metals ICPMS

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710792	WMWGADAP_1341
BB18669	710792	WMWGADAP_1341
BB18670	710792	WMWGADAP_1341
BB18671	710792	WMWGADAP_1341
BB18672	710792	WMWGADAP_1341
BB18673	710792	WMWGADAP_1341
BB18674	710792	WMWGADAP_1341
BB18675	710792	WMWGADAP_1341
BB18737	710792	WMWGADAP_1341
BB18738	710792	WMWGADAP_1341
BB18739	710793	WMWGADAP_1341
BB18740	710793	WMWGADAP_1341
BB18741	710793	WMWGADAP_1341
BB18742	710793	WMWGADAP_1341
BB18743	710793	WMWGADAP_1341
BB18744	710793	WMWGADAP_1341
BB18745	710793	WMWGADAP_1341
BB18746	710793	WMWGADAP_1341
BB18995	710820	WMWGADAP_1341
BB18996	710820	WMWGADAP_1341
BB18997	710820	WMWGADAP_1341
BB18998	710820	WMWGADAP_1341
BB18999	710820	WMWGADAP_1341
BB19000	710820	WMWGADAP_1341
BB19001	710820	WMWGADAP_1341
BB19002	710820	WMWGADAP_1341
BB19003	710820	WMWGADAP_1341
BB19004	710820	WMWGADAP_1341
BB19005	710821	WMWGADAP_1341
BB19006	710821	WMWGADAP_1341
BB19007	710821	WMWGADAP_1341

BB19008	710821	WMWGADAP_1341
BB19009	710821	WMWGADAP_1341
BB19010	710821	WMWGADAP_1341
BB19011	710821	WMWGADAP_1341

4. All of the above samples were analyzed by EPA 200.8 and prepared by EPA 1638.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for accuracy were met, except for the following:
    - BB19004 Manganese MS/MSD spike level was <30% of the sample concentration.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BB18670	Manganese	92.365
BB18671	Manganese	5.075
BB18672	Manganese	5.075
BB18741	Manganese	5.075
BB18742	Manganese	5.075
BB18997	Manganese	5.075
BB19004	Manganese	92.365
BB19008	Manganese	5.075
BB19009	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Dissolved Metals ICPMS

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710722	WMWGADAP_1341
BB18669	710722	WMWGADAP_1341
BB18670	710722	WMWGADAP_1341
BB18671	710722	WMWGADAP_1341
BB18672	710722	WMWGADAP_1341
BB18674	710722	WMWGADAP_1341
BB18675	710722	WMWGADAP_1341
BB18738	710722	WMWGADAP_1341
BB18739	710722	WMWGADAP_1341
BB18740	710722	WMWGADAP_1341
BB18741	710723	WMWGADAP_1341
BB18742	710723	WMWGADAP_1341
BB18743	710723	WMWGADAP_1341
BB18744	710723	WMWGADAP_1341
BB18745	710723	WMWGADAP_1341
BB18995	710731	WMWGADAP_1341
BB18996	710731	WMWGADAP_1341
BB18997	710731	WMWGADAP_1341
BB18999	710731	WMWGADAP_1341
BB19000	710731	WMWGADAP_1341
BB19001	710731	WMWGADAP_1341
BB19002	710731	WMWGADAP_1341
BB19003	710731	WMWGADAP_1341
BB19004	710731	WMWGADAP_1341
BB19005	710731	WMWGADAP_1341
BB19006	710732	WMWGADAP_1341
BB19007	710732	WMWGADAP_1341
BB19008	710732	WMWGADAP_1341
BB19009	710732	WMWGADAP_1341
BB19010	710732	WMWGADAP_1341

4. All of the above samples were analyzed and prepared by EPA 200.8 for dissolved analysis.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes.
- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- Due to no filtered method blank (MB) or laboratory control sample (LCS) submitted with the sample set, an unfiltered MB and LCS were analyzed with the samples in each batch.
- All laboratory control sample criteria were met.
- The method blank associated with each preparation batch passed all acceptance criteria for all requested analytes.
- The interference check samples associated with EPA 200.8 were analyzed and passed for all requested analytes.
- All sample internal standard criteria were met.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were analyzed with each ICPMS batch. All acceptance criteria for precision were met.

7. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BB18670	Manganese	92.365
BB18671	Manganese	5.075
BB18672	Manganese	5.075
BB18741	Manganese	5.075
BB18742	Manganese	5.075
BB18997	Manganese	5.075
BB19004	Manganese	92.365
BB19008	Manganese	5.075
BB19009	Manganese	5.075

8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Mercury

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710155	WMWGADAP_1341
BB18669	710155	WMWGADAP_1341
BB18670	710155	WMWGADAP_1341
BB18671	710155	WMWGADAP_1341
BB18672	710155	WMWGADAP_1341
BB18673	710155	WMWGADAP_1341
BB18674	710155	WMWGADAP_1341
BB18675	710155	WMWGADAP_1341
BB18737	710155	WMWGADAP_1341
BB18738	710155	WMWGADAP_1341
BB18739	710156	WMWGADAP_1341
BB18740	710156	WMWGADAP_1341
BB18741	710156	WMWGADAP_1341
BB18742	710156	WMWGADAP_1341
BB18743	710156	WMWGADAP_1341
BB18744	710156	WMWGADAP_1341
BB18745	710156	WMWGADAP_1341
BB18746	710156	WMWGADAP_1341
BB18995	710867	WMWGADAP_1341
BB18996	710867	WMWGADAP_1341
BB18997	710867	WMWGADAP_1341
BB18998	710867	WMWGADAP_1341
BB18999	710867	WMWGADAP_1341
BB19000	710867	WMWGADAP_1341
BB19001	710867	WMWGADAP_1341
BB19002	710867	WMWGADAP_1341
BB19003	710867	WMWGADAP_1341
BB19004	710867	WMWGADAP_1341
BB19005	710868	WMWGADAP_1341
BB19006	710868	WMWGADAP_1341
BB19007	710868	WMWGADAP_1341

BB19008	710868	WMWGADAP_1341
BB19009	710868	WMWGADAP_1341
BB19010	710868	WMWGADAP_1341
BB19011	710868	WMWGADAP_1341

4. All of the above samples were analyzed and prepared by EPA 245.1.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed, and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.
8. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

TDS

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710066	WMWGADAP_1341
BB18669	710066	WMWGADAP_1341
BB18670	710066	WMWGADAP_1341
BB18671	710066	WMWGADAP_1341
BB18672	710066	WMWGADAP_1341
BB18673	710066	WMWGADAP_1341
BB18674	710066	WMWGADAP_1341
BB18675	710144	WMWGADAP_1341
BB18737	710067	WMWGADAP_1341
BB18738	710066	WMWGADAP_1341
BB18739	710067	WMWGADAP_1341
BB18740	710067	WMWGADAP_1341
BB18741	710067	WMWGADAP_1341
BB18742	710067	WMWGADAP_1341
BB18743	710067	WMWGADAP_1341
BB18744	710144	WMWGADAP_1341
BB18745	710144	WMWGADAP_1341
BB18746	710144	WMWGADAP_1341
BB18995	710395	WMWGADAP_1341
BB18996	710395	WMWGADAP_1341
BB18997	710395	WMWGADAP_1341
BB18998	710395	WMWGADAP_1341
BB18999	710395	WMWGADAP_1341
BB19000	710395	WMWGADAP_1341
BB19001	710395	WMWGADAP_1341
BB19002	710396	WMWGADAP_1341
BB19003	710396	WMWGADAP_1341
BB19004	710396	WMWGADAP_1341
BB19005	710396	WMWGADAP_1341
BB19006	710396	WMWGADAP_1341
BB19007	710396	WMWGADAP_1341

BB19008	710396	WMWGADAP_1341
BB19009	710396	WMWGADAP_1341
BB19010	710396	WMWGADAP_1341
BB19011	710396	WMWGADAP_1341

4. All of the above samples were analyzed and prepared by Standard Method 2540C.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- A Method Blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- Samples were between 2.5mg and 200mg residue.
- All samples with residue <2.5mg had the maximum volume of 150mL filtered. Affected samples are as follows:
    - BB18673
    - BB18737
    - BB18746
    - BB18998
    - BB19011

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alabama Power

Anions

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710076, 710334, & 710088	WMWGADAP_1341
BB18669	710076, 710334, & 710088	WMWGADAP_1341
BB18670	710076, 710334, & 710088	WMWGADAP_1341
BB18671	710076, 710334, & 710088	WMWGADAP_1341
BB18672	710076, 710334, & 710088	WMWGADAP_1341
BB18673	710076, 710334, & 710088	WMWGADAP_1341
BB18674	710076, 710334, & 710088	WMWGADAP_1341
BB18675	710076, 710334, & 710088	WMWGADAP_1341
BB18737	710077, 710334, & 710089	WMWGADAP_1341
BB18738	710077, 710334, & 710089	WMWGADAP_1341
BB18739	710077, 710335, & 710089	WMWGADAP_1341
BB18740	710077, 710335, & 710089	WMWGADAP_1341
BB18741	710077, 710335, & 710089	WMWGADAP_1341
BB18742	710077, 710335, & 710089	WMWGADAP_1341
BB18743	710077, 710335, & 710089	WMWGADAP_1341
BB18744	710077, 710335, & 710089	WMWGADAP_1341
BB18745	710077, 710335, & 710089	WMWGADAP_1341
BB18746	710077, 710335, & 710089	WMWGADAP_1341
BB18995	710405, 710336, & 710964	WMWGADAP_1341
BB18996	710405, 710336, & 710964	WMWGADAP_1341
BB18997	710405, 710336, & 710964	WMWGADAP_1341
BB18998	710405, 710336, & 710964	WMWGADAP_1341
BB18999	710405, 710336, & 710964	WMWGADAP_1341
BB19000	710405, 710336, & 710964	WMWGADAP_1341
BB19001	710405, 710336, & 710964	WMWGADAP_1341
BB19002	710405, 710336, & 710964	WMWGADAP_1341
BB19003	710405, 710336, & 710964	WMWGADAP_1341
BB19004	710405, 710336, & 710964	WMWGADAP_1341
BB19005	710406, 710337, & 710965	WMWGADAP_1341
BB19006	710406, 710337, & 710965	WMWGADAP_1341
BB19007	710406, 710337, & 710965	WMWGADAP_1341

BB19008	710406, 710337, & 710965	WMWGADAP_1341
BB19009	710406, 710337, & 710965	WMWGADAP_1341
BB19010	710406, 710337, & 710965	WMWGADAP_1341
BB19011	710406, 710337, & 710965	WMWGADAP_1341

4. All of the above samples were analyzed and prepared by SM4500 Cl E, SM4500 F G, and SM4500 SO4 E.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- All calibration met criteria for the requested analyte.
- Prior to sample analysis, an initial calibration verification (ICV), and all criteria were met.
- Prior to sample analysis, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

Similarity of matrix and therefore relevance of matrix specific QC results should not be automatically inferred for any sample other than the sample selected for QC.

- A matrix spike was analyzed with each batch. Acceptance criteria for accuracy were met.
- A sample duplicate was analyzed with each batch. Acceptance criteria for precision were met, except for the following:
    - BB19011 Sulfate precision is invalid due to sample concentration.

7. Samples BB18675, BB19006, & BB19007 results for Fluoride are qualified due to potential matrix interferences.

8. The following samples were diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BB18670	Sulfate	16
BB18675	Sulfate	5
BB18741	Sulfate	16
BB18742	Sulfate	32
BB18745	Chloride & Fluoride	40 & 3
BB18996	Sulfate	2
BB18997	Sulfate	5
BB18999	Chloride & Fluoride	4 & 2
BB19004	Sulfate	16
BB19006	Sulfate	5
BB19007	Sulfate	5
BB19010	Sulfate	8

9. The raw data results are shown with dilution factors included.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Case Narrative

Alkalinity

Gadsden Ash Pond

WMWGADAP_1341

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. Refer to comments on Chain of Custody for information regarding sample receipt.
3. All standards and solutions meet NELAP traceability requirements and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
BB18668	710513 & 710514	WMWGADAP_1341
BB18669	710513 & 710514	WMWGADAP_1341
BB18670	710513 & 710514	WMWGADAP_1341
BB18671	710513 & 710514	WMWGADAP_1341
BB18672	710513 & 710514	WMWGADAP_1341
BB18674	710513 & 710514	WMWGADAP_1341
BB18675	710513 & 710514	WMWGADAP_1341
BB18738	710513 & 710514	WMWGADAP_1341
BB18739	710513 & 710514	WMWGADAP_1341
BB18740	710513 & 710514	WMWGADAP_1341
BB18741	710513 & 710514	WMWGADAP_1341
BB18742	710513 & 710514	WMWGADAP_1341
BB18743	710513 & 710514	WMWGADAP_1341
BB18744	710513 & 710514	WMWGADAP_1341
BB18745	710513 & 710514	WMWGADAP_1341
BB18995	710513 & 710514	WMWGADAP_1341
BB18996	710513 & 710514	WMWGADAP_1341
BB18997	710513 & 710514	WMWGADAP_1341
BB18999	710513 & 710514	WMWGADAP_1341
BB19000	710513 & 710514	WMWGADAP_1341
BB19001	710927 & 710928	WMWGADAP_1341
BB19002	710927 & 710928	WMWGADAP_1341
BB19003	710927 & 710928	WMWGADAP_1341
BB19004	710927 & 710928	WMWGADAP_1341
BB19005	710927 & 710928	WMWGADAP_1341
BB19006	710927 & 710928	WMWGADAP_1341
BB19007	710927 & 710928	WMWGADAP_1341
BB19008	710927 & 710928	WMWGADAP_1341
BB19009	710927 & 710928	WMWGADAP_1341
BB19010	710927 & 710928	WMWGADAP_1341

4. All of the above samples were analyzed and prepared by Standard Method 2320B, except for the following:
    a. Samples BB18675, BB19006, & BB19007 were not analyzed for Alkalinity due to the initial pH readings were below the titration end point.
5. All samples were prepared and analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.

General Quality Control Procedures:

- An initial pH check was analyzed with each batch. The acceptance criteria were met.
- A final pH check was analyzed with each batch. The acceptance criteria were met.
- An alkalinity laboratory control sample was analyzed with each batch. Range criteria of within 10% of true value was met.
- An alkalinity sample duplicate was analyzed with each batch. Precision criteria less than 10 RPD was met.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 10/5/21 11:00
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18668

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:07		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/13/21 10:10	10/15/21 11:07		1.015	17.6	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:07		1.015	0.170	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:07		1.015	3.58	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:07		1.015	6.56	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:15		1.015	0.0923	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.0000928	mg/L	0.000068	0.000203	J
* Barium, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.118	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:29		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.000346	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.00287	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.000121	mg/L	0.000068	0.000203	J
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.000280	mg/L	0.000068	0.000203	
* Potassium, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.535	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 11:29		1.015	0.195	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 11:29		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:29		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:25		1.015	0.191	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 21:54		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	67.4	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	101	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-2

Location Code: WMWGADAP
Collected: 10/5/21 11:00
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18668

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	67.4	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:21	10/7/21 12:21		1	5.79	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:25	10/13/21 10:25		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:14	10/7/21 10:14		1	5.29	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/5/21 10:55	10/5/21 10:55			165.56	uS/cm			FA
pH	10/5/21 10:55	10/5/21 10:55			5.72	SU			FA
Temperature	10/5/21 10:55	10/5/21 10:55			21.06	C			FA
Turbidity	10/5/21 10:55	10/5/21 10:55			4.86	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:00
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BB18668

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:00
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - PZ-2

Laboratory ID Number: BB18668

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 10/5/21 12:10
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18669

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:10		1.015	0.0649	mg/L	0.030000	0.1015	J
* Calcium, Total	10/13/21 10:10	10/15/21 11:10		1.015	11.4	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:10		1.015	0.0726	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:10		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:10		1.015	3.29	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:10		1.015	11.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:18		1.015	0.0714	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/8/21 11:18	10/11/21 11:33		1.015	0.0741	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:33		1.015	0.000246	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:33		1.015	0.00104	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 11:33		1.015	0.979	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 11:33		1.015	0.241	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:33		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:29		1.015	0.231	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 21:58		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	45.5	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	96.7	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-6

Location Code: WMWGADAP
Collected: 10/5/21 12:10
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18669

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	45.5	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:22	10/7/21 12:22		1	9.09	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:26	10/13/21 10:26		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:17	10/7/21 10:17		1	14.2	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/5/21 12:05	10/5/21 12:05			166.61	uS/cm			FA
pH	10/5/21 12:05	10/5/21 12:05			5.74	SU			FA
Temperature	10/5/21 12:05	10/5/21 12:05			20.04	C			FA
Turbidity	10/5/21 12:05	10/5/21 12:05			0.56	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 12:10
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BB18669

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 12:10
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-6

Laboratory ID Number: BB18669

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 10/5/21 13:25
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18670

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:13		1.015	1.01	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 13:31		10.15	65.9	mg/L	0.70035	4.06	
* Iron, Total	10/13/21 10:10	10/15/21 11:13		1.015	0.256	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:13		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:13		1.015	16.8	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:13		1.015	12.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:21		1.015	0.244	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:36		1.015	0.000207	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 11:36		1.015	0.0344	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:36		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:36		1.015	0.000213	mg/L	0.000068	0.000203	
* Chromium, Total	10/8/21 11:18	10/11/21 11:36		1.015	0.000234	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:36		1.015	0.0160	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 11:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:36		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 11:36		1.015	3.32	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 13:09		92.365	24.8	mg/L	0.006188	0.018473	
* Selenium, Total	10/8/21 11:18	10/11/21 11:36		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:36		1.015	0.000136	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/11/21 10:54		92.365	25.1	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	74.0	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	389	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-3

Location Code: WMWGADAP
Collected: 10/5/21 13:25
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18670

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	74.0	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:25	10/7/21 12:25		1	5.09	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:27	10/13/21 10:27		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:26	10/7/21 10:26		16	228	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/5/21 13:21	10/5/21 13:21			622.14	uS/cm			FA
pH	10/5/21 13:21	10/5/21 13:21			5.76	SU			FA
Temperature	10/5/21 13:21	10/5/21 13:21			21.28	C			FA
Turbidity	10/5/21 13:21	10/5/21 13:21			0.41	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 13:25
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BB18670

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 13:25
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-3

Laboratory ID Number: BB18670

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 10/5/21 14:35
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18671

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:17		1.015	0.344	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 11:17		1.015	27.4	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 13:34		101.5	44.5	mg/L	0.8120	4.06	
* Lithium, Total	10/13/21 10:10	10/15/21 11:17		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:17		1.015	7.93	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:17		1.015	14.3	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:36		101.5	45.0	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:40		1.015	0.0147	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 11:40		1.015	0.202	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/8/21 11:18	10/11/21 11:40		1.015	0.0238	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:40		1.015	0.00111	mg/L	0.000068	0.000203	
* Potassium, Total	10/8/21 11:18	10/11/21 11:40		1.015	2.46	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 13:13		5.075	1.24	mg/L	0.000340	0.001015	
* Selenium, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/11/21 10:57		5.075	1.31	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	113	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	200	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4

Location Code: WMWGADAP
Collected: 10/5/21 14:35
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18671

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	113	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:26	10/7/21 12:26		1	9.30	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:29	10/13/21 10:29		1	0.214	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:19	10/7/21 10:19		1	37.8	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/5/21 14:34	10/5/21 14:34			431.22	uS/cm			FA
pH	10/5/21 14:34	10/5/21 14:34			6.58	SU			FA
Temperature	10/5/21 14:34	10/5/21 14:34			20.73	C			FA
Turbidity	10/5/21 14:34	10/5/21 14:34			2.08	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 14:35
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BB18671

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 14:35
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-4

Laboratory ID Number: BB18671

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4 DUP

Location Code: WMWGADAP
Collected: 10/5/21 14:35
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18672

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:20		1.015	0.347	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 11:20		1.015	27.8	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 13:37		101.5	44.9	mg/L	0.8120	4.06	
* Lithium, Total	10/13/21 10:10	10/15/21 11:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:20		1.015	7.98	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:20		1.015	14.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:39		101.5	44.5	mg/L	0.8120	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:44		1.015	0.0148	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 11:44		1.015	0.208	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:44		1.015	0.000224	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:44		1.015	0.0236	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 11:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:44		1.015	0.00109	mg/L	0.000068	0.000203	
* Potassium, Total	10/8/21 11:18	10/11/21 11:44		1.015	2.48	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 13:16		5.075	1.29	mg/L	0.000340	0.001015	
* Selenium, Total	10/8/21 11:18	10/11/21 11:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/11/21 11:01		5.075	1.33	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	118	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	197	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4 DUP

Location Code: WMWGADAP
Collected: 10/5/21 14:35
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18672

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	118	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:27	10/7/21 12:27		1	9.83	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:30	10/13/21 10:30		1	0.205	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:20	10/7/21 10:20		1	36.9	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/5/21 14:34	10/5/21 14:34			431.22	uS/cm			FA
pH	10/5/21 14:34	10/5/21 14:34			6.58	SU			FA
Temperature	10/5/21 14:34	10/5/21 14:34			20.73	C			FA
Turbidity	10/5/21 14:34	10/5/21 14:34			2.08	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 14:35
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-4 DUP

Laboratory ID Number: BB18672

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 14:35
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-4 DUP

Laboratory ID Number: BB18672

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-1

Location Code: WMWGADAPFB
Collected: 10/5/21 15:30
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18673

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:23		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/13/21 10:10	10/15/21 11:23		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/13/21 10:10	10/15/21 11:23		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/13/21 10:10	10/15/21 11:23		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:23		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/13/21 10:10	10/15/21 11:23		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/8/21 11:18	10/11/21 11:47		1.015	0.000138	mg/L	0.000068	0.000203	J
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:47		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:28	10/7/21 12:28		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:31	10/13/21 10:31		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:21	10/7/21 10:21		1	Not Detected	mg/L	0.50	1	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 10/5/21 15:30
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BB18673

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 10/5/21 15:30
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond Field Blank-1

Laboratory ID Number: BB18673

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 10/6/21 08:45
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18674

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:27		1.015	0.0305	mg/L	0.030000	0.1015	J
* Calcium, Total	10/13/21 10:10	10/15/21 11:27		1.015	31.0	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:27		1.015	0.0754	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:27		1.015	0.00881	mg/L	0.007105	0.01999956	J
* Magnesium, Total	10/13/21 10:10	10/15/21 11:27		1.015	5.30	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:27		1.015	26.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:32		1.015	0.0106	mg/L	0.008120	0.0406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.000263	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.307	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.000273	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.000126	mg/L	0.000068	0.000203	J
* Lead, Total	10/8/21 11:18	10/11/21 11:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.000453	mg/L	0.000068	0.000203	
* Potassium, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.567	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 11:51		1.015	0.0175	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 11:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:43		1.015	0.0169	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	123	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	182	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-17

Location Code: WMWGADAP
Collected: 10/6/21 08:45
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18674

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	122	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	1.23	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:23	10/7/21 12:23		1	2.98	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:32	10/13/21 10:32		1	0.175	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:15	10/7/21 10:15		1	10.2	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/6/21 08:42	10/6/21 08:42			317.65	uS/cm			FA
pH	10/6/21 08:42	10/6/21 08:42			7.92	SU			FA
Temperature	10/6/21 08:42	10/6/21 08:42			20.50	C			FA
Turbidity	10/6/21 08:42	10/6/21 08:42			8.25	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/6/21 08:45
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BB18674

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/6/21 08:45
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-17

Laboratory ID Number: BB18674

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 10/6/21 10:10
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18675

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:30		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/13/21 10:10	10/15/21 11:30		1.015	13.4	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:30		1.015	0.00888	mg/L	0.008120	0.0406	J
* Lithium, Total	10/13/21 10:10	10/15/21 11:30		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:30		1.015	5.08	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:30		1.015	2.74	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:35		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:54		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.00207	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.0215	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.000487	mg/L	0.000406	0.001015	J
* Cadmium, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.000680	mg/L	0.000068	0.000203	
* Chromium, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.000455	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.0321	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.00116	mg/L	0.000068	0.000203	
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.349	mg/L	0.169505	0.5075	J
* Manganese, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.382	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 11:54		1.015	0.00262	mg/L	0.000508	0.001015	
* Thallium, Total	10/8/21 11:18	10/11/21 11:54		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:46		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/12/21 11:15	10/13/21 12:56		1	136	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:29	10/7/21 12:29		1	3.17	mg/L	0.50	1	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB18675 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-16

Location Code: WMWGADAP
Collected: 10/6/21 10:10
Customer ID:
Submittal Date: 10/6/21 15:07

Laboratory ID Number: BB18675

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:33	10/13/21 10:33		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/7/21 10:24	10/7/21 10:24		5	93.5	mg/L	2.50	5	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/6/21 10:08	10/6/21 10:08			272.73	uS/cm			FA
pH	10/6/21 10:08	10/6/21 10:08			4.16	SU			FA
Temperature	10/6/21 10:08	10/6/21 10:08			19.55	C			FA
Turbidity	10/6/21 10:08	10/6/21 10:08			3.19	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB18675 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/6/21 10:10
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BB18675

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB18675 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/6/21 10:10
Customer ID:
Delivery Date: 10/6/21 15:07

Description: Gadsden Ash Pond - MW-16

Laboratory ID Number: BB18675

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18675	Chloride	mg/L	0.0266	1.00	10.0	13.7	3.25	10.1	9.00 to 11.0	105	80.0 to 120	2.49	20.0
BB18675	Sulfate	mg/L	0.420	1.00	100	201	83.5	20.3	18.0 to 22.0	108	80.0 to 120	11.3	20.0
BB18744	Solids, Dissolved	mg/L	1.00	25.0			326	50.0	40.0 to 60.0			1.40	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB18675 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-2

Location Code: WMWGADAPEB
Collected: 10/5/21 10:20
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18737

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:34		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/13/21 10:10	10/15/21 11:34		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/13/21 10:10	10/15/21 11:34		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/13/21 10:10	10/15/21 11:34		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:34		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/13/21 10:10	10/15/21 11:34		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 11:58		1.015	0.000206	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 11:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:43	10/7/21 12:43		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:35	10/13/21 10:35		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:21	10/11/21 12:21		1	Not Detected	mg/L	0.50	1	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 10/5/21 10:20
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond Equipment Blank-2

Laboratory ID Number: BB18737

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPEB
Sample Date: 10/5/21 10:20
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond Equipment Blank-2

Laboratory ID Number: BB18737

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB18741	Solids, Dissolved	mg/L	0.0000	25.0			377	49.0	40.0 to 60.0			0.132	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 10/5/21 11:00
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18738

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:37		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/13/21 10:10	10/15/21 11:37		1.015	25.4	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:37		1.015	0.0485	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:37		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:37		1.015	3.87	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:37		1.015	3.90	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:38		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/8/21 11:18	10/11/21 12:01		1.015	0.0811	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:01		1.015	0.000352	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:01		1.015	0.000436	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:01		1.015	0.0000730	mg/L	0.000068	0.000203	J
* Potassium, Total	10/8/21 11:18	10/11/21 12:01		1.015	0.497	mg/L	0.169505	0.5075	J
* Manganese, Total	10/8/21 11:18	10/11/21 12:01		1.015	0.0494	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:01		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:50		1.015	0.0265	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/14/21 16:58	10/14/21 22:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	81.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	108	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-1

Location Code: WMWGADAP
Collected: 10/5/21 11:00
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18738

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	81.2	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:44	10/7/21 12:44		1	3.23	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 10:36	10/13/21 10:36		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:22	10/11/21 12:22		1	2.17	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/21 10:57	10/5/21 10:57			168.13	uS/cm			FA
pH	10/5/21 10:57	10/5/21 10:57			6.46	SU			FA
Temperature	10/5/21 10:57	10/5/21 10:57			19.85	C			FA
Turbidity	10/5/21 10:57	10/5/21 10:57			0.96	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:00
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BB18738

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18738	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.106	0.104	0.102	0.0850 to 0.115	106	70.0 to 130	1.90	20.0
BB18738	Sodium, Total	mg/L	0.00361	0.0660	5.00	9.14	9.19	5.00	4.25 to 5.75	105	70.0 to 130	0.546	20.0
BB18738	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.148	0.152	0.101	0.0850 to 0.115	98.6	70.0 to 130	2.67	20.0
BB18738	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0998	0.102	0.100	0.0850 to 0.115	99.4	70.0 to 130	2.18	20.0
BB18738	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.169	0.168	0.0995	0.0850 to 0.115	87.9	70.0 to 130	0.593	20.0
BB18738	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.105	0.0961	0.0850 to 0.115	103	70.0 to 130	1.92	20.0
BB18738	Iron, Total	mg/L	0.000319	0.0176	0.2	0.244	0.248	0.203	0.170 to 0.230	97.8	70.0 to 130	1.63	20.0
BB18738	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0914	0.0919	0.0919	0.0850 to 0.115	91.4	70.0 to 130	0.546	20.0
BB18738	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	8.97	9.07	5.14	4.25 to 5.75	102	70.0 to 130	1.11	20.0
BB18738	Potassium, Total	mg/L	0.00310	0.367	10.0	10.5	10.6	9.99	8.50 to 11.5	100	70.0 to 130	0.948	20.0
BB18738	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0962	0.0937	0.0952	0.0850 to 0.115	96.2	70.0 to 130	2.63	20.0
BB18738	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0988	0.0942	0.0913	0.0850 to 0.115	98.8	70.0 to 130	4.77	20.0
BB18738	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.202	0.206	0.198	0.170 to 0.230	101	70.0 to 130	1.96	20.0
BB18738	Calcium, Total	mg/L	0.00499	0.152	5.00	30.3	30.5	5.12	4.25 to 5.75	98.0	70.0 to 130	0.658	20.0
BB18738	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0993	0.0995	0.0962	0.0850 to 0.115	99.2	70.0 to 130	0.201	20.0
BB18738	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00409	0.00403	0.0038	0.00340 to 0.00460	102	70.0 to 130	1.48	20.0
BB18738	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0989	0.0999	0.0973	0.0850 to 0.115	98.9	70.0 to 130	1.01	20.0
BB18738	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0984	0.102	0.0988	0.0850 to 0.115	98.0	70.0 to 130	3.59	20.0
BB18738	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0999	0.104	0.102	0.0850 to 0.115	99.9	70.0 to 130	4.02	20.0
BB18738	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.987	0.999	0.989	0.850 to 1.15	98.7	70.0 to 130	1.21	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:00
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - PZ-1

Laboratory ID Number: BB18738

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18674	Solids, Dissolved	mg/L	0.0000	25.0			173	49.0	40.0 to 60.0			2.54	10.0
BB18738	Fluoride	mg/L	-0.0124	0.100	2.50	2.60	0.0527	2.38	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 10/5/21 11:53
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18739

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:54		1.015	0.260	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 11:54		1.015	36.0	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:54		1.015	0.283	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:54		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:54		1.015	7.42	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:54		1.015	13.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:42		1.015	0.213	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.000133	mg/L	0.000068	0.000203	J
* Barium, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.221	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:23		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.000281	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.00116	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 12:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.000150	mg/L	0.000068	0.000203	J
* Potassium, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.736	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 12:23		1.015	0.166	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 12:23		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:23		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:53		1.015	0.174	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	135	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	168	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5

Location Code: WMWGADAP
Collected: 10/5/21 11:53
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18739

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	135	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.03	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:45	10/7/21 12:45		1	6.78	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:41	10/13/21 12:41		1	0.122	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:24	10/11/21 12:24		1	14.4	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/21 11:50	10/5/21 11:50			267.75	uS/cm			FA
pH	10/5/21 11:50	10/5/21 11:50			6.24	SU			FA
Temperature	10/5/21 11:50	10/5/21 11:50			21.08	C			FA
Turbidity	10/5/21 11:50	10/5/21 11:50			2.81	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:53
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BB18739

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:53
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-5

Laboratory ID Number: BB18739

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB18741	Solids, Dissolved	mg/L	0.0000	25.0			377	49.0	40.0 to 60.0			0.132	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5 DUP

Location Code: WMWGADAP
Collected: 10/5/21 11:53
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18740

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 11:57		1.015	0.260	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 11:57		1.015	35.9	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 11:57		1.015	0.286	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 11:57		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 11:57		1.015	7.37	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 11:57		1.015	13.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 12:45		1.015	0.214	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.000162	mg/L	0.000068	0.000203	J
* Barium, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.229	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:26		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.000275	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.00108	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.000142	mg/L	0.000068	0.000203	J
* Potassium, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.689	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 12:26		1.015	0.160	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 12:26		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:26		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 14:57		1.015	0.167	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	142	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	180	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-5 DUP

Location Code: WMWGADAP
Collected: 10/5/21 11:53
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18740

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	142	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.04	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:46	10/7/21 12:46		1	6.84	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:42	10/13/21 12:42		1	0.104	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:25	10/11/21 12:25		1	14.5	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/21 11:50	10/5/21 11:50			267.75	uS/cm			FA
pH	10/5/21 11:50	10/5/21 11:50			6.24	SU			FA
Temperature	10/5/21 11:50	10/5/21 11:50			21.08	C			FA
Turbidity	10/5/21 11:50	10/5/21 11:50			2.81	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:53
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-5 DUP

Laboratory ID Number: BB18740

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18740	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.408	0.412	0.203	0.170 to 0.230	97.0	70.0 to 130	0.976	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18740	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.268	0.275	0.101	0.0850 to 0.115	101	70.0 to 130	2.58	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 11:53
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-5 DUP

Laboratory ID Number: BB18740

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18741	Solids, Dissolved	mg/L	0.0000	25.0			377	49.0	40.0 to 60.0			0.132	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 10/5/21 12:58
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18741

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 12:01		1.015	0.0661	mg/L	0.030000	0.1015	J
* Calcium, Total	10/13/21 10:10	10/15/21 13:41		10.15	55.8	mg/L	0.70035	4.06	
* Iron, Total	10/13/21 10:10	10/15/21 12:01		1.015	0.0729	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 12:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 12:01		1.015	26.0	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 12:01		1.015	15.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:02		1.015	0.0602	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/8/21 11:18	10/11/21 12:30		1.015	0.0417	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:30		1.015	0.000367	mg/L	0.000068	0.000203	
* Chromium, Total	10/8/21 11:18	10/11/21 12:30		1.015	0.000339	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:30		1.015	0.00448	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 12:30		1.015	0.853	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 13:20		5.075	1.87	mg/L	0.000340	0.001015	
* Selenium, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:30		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/11/21 11:04		5.075	1.86	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	39.6	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	378	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-12

Location Code: WMWGADAP
Collected: 10/5/21 12:58
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18741

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	39.6	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:48	10/7/21 12:48		1	6.26	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:44	10/13/21 12:44		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:26	10/11/21 12:26		16	195	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/21 12:55	10/5/21 12:55			510.48	uS/cm			FA
pH	10/5/21 12:55	10/5/21 12:55			5.19	SU			FA
Temperature	10/5/21 12:55	10/5/21 12:55			18.44	C			FA
Turbidity	10/5/21 12:55	10/5/21 12:55			0.39	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 12:58
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BB18741

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18745	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	97.1	70.0 to 130	0.966	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18745	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.211	0.214	0.203	0.170 to 0.230	99.2	70.0 to 130	1.41	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 12:58
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-12

Laboratory ID Number: BB18741

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB18741	Solids, Dissolved	mg/L	0.0000	25.0			377	49.0	40.0 to 60.0			0.132	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 10/5/21 14:18
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18742

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 12:04		1.015	1.02	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 13:44		10.15	198	mg/L	0.70035	4.06	
* Iron, Total	10/13/21 10:10	10/15/21 12:04		1.015	2.38	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 12:04		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 13:44		10.15	41.7	mg/L	0.21315	4.06	
* Sodium, Total	10/13/21 10:10	10/15/21 12:04		1.015	21.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:05		1.015	2.39	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:34		1.015	0.00356	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 12:34		1.015	0.0304	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:34		1.015	0.000102	mg/L	0.000068	0.000203	J
* Chromium, Total	10/8/21 11:18	10/11/21 12:34		1.015	0.000228	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:34		1.015	0.0169	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 12:34		1.015	8.76	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 13:24		5.075	3.57	mg/L	0.000340	0.001015	
* Selenium, Total	10/8/21 11:18	10/11/21 12:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/11/21 11:08		5.075	3.74	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	107	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	964	mg/L		50	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-1

Location Code: WMWGADAP
Collected: 10/5/21 14:18
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18742

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	107	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.01	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:49	10/7/21 12:49		1	6.10	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:45	10/13/21 12:45		1	0.0601	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:27	10/11/21 12:27		32	567	mg/L	16.00	32	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/21 14:15	10/5/21 14:15			1200.42	uS/cm			FA
pH	10/5/21 14:15	10/5/21 14:15			5.79	SU			FA
Temperature	10/5/21 14:15	10/5/21 14:15			18.80	C			FA
Turbidity	10/5/21 14:15	10/5/21 14:15			2.76	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 14:18
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BB18742

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18745	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.211	0.214	0.203	0.170 to 0.230	99.2	70.0 to 130	1.41	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18745	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	97.1	70.0 to 130	0.966	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 14:18
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-1

Laboratory ID Number: BB18742

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB18741	Solids, Dissolved	mg/L	0.0000	25.0			377	49.0	40.0 to 60.0			0.132	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 10/5/21 15:11
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18743

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 12:07		1.015	0.0673	mg/L	0.030000	0.1015	J
* Calcium, Total	10/13/21 10:10	10/15/21 12:07		1.015	15.9	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 12:07		1.015	0.0213	mg/L	0.008120	0.0406	J
* Lithium, Total	10/13/21 10:10	10/15/21 12:07		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 12:07		1.015	3.51	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 12:07		1.015	15.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:09		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.0000694	mg/L	0.000068	0.000203	J
* Barium, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.0716	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:37		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.000248	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.000182	mg/L	0.000068	0.000203	J
* Lead, Total	10/8/21 11:18	10/11/21 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.0000955	mg/L	0.000068	0.000203	J
* Potassium, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.292	mg/L	0.169505	0.5075	J
* Manganese, Total	10/8/21 11:18	10/11/21 12:37		1.015	0.0486	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 12:37		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:37		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 15:26		1.015	0.0551	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:38		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	70.2	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/11/21 12:09	10/12/21 13:44		1	113	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-7

Location Code: WMWGADAP
Collected: 10/5/21 15:11
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18743

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	70.2	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.02	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:50	10/7/21 12:50		1	6.43	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:46	10/13/21 12:46		1	0.0933	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:28	10/11/21 12:28		1	9.19	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/5/21 15:08	10/5/21 15:08			162.09	uS/cm			FA
pH	10/5/21 15:08	10/5/21 15:08			6.06	SU			FA
Temperature	10/5/21 15:08	10/5/21 15:08			19.14	C			FA
Turbidity	10/5/21 15:08	10/5/21 15:08			0.99	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/5/21 15:11
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BB18743

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18745	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	97.1	70.0 to 130	0.966	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18745	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.211	0.214	0.203	0.170 to 0.230	99.2	70.0 to 130	1.41	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/5/21 15:11
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-7

Laboratory ID Number: BB18743

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB18741	Solids, Dissolved	mg/L	0.0000	25.0			377	49.0	40.0 to 60.0			0.132	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 10/6/21 10:25
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18744

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 12:11		1.015	0.540	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 12:11		1.015	5.38	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 12:11		1.015	0.0933	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 12:11		1.015	0.0685	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/13/21 10:10	10/15/21 12:11		1.015	1.31	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 13:47		101.5	126	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:12		1.015	0.0384	mg/L	0.008120	0.0406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:41		1.015	0.00139	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 12:41		1.015	0.120	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:41		1.015	0.000250	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:41		1.015	0.00363	mg/L	0.000068	0.000203	
* Potassium, Total	10/8/21 11:18	10/11/21 12:41		1.015	0.706	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 12:41		1.015	0.0144	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 15:29		1.015	0.0135	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:42		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	269	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/12/21 11:15	10/13/21 12:56		1	317	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VA

Location Code: WMWGADAP
Collected: 10/6/21 10:25
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18744

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	265	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	4.23	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:51	10/7/21 12:51		1	6.82	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:47	10/13/21 12:47		1	2.56	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:30	10/11/21 12:30		1	2.44	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/6/21 10:22	10/6/21 10:22			470.65	uS/cm			FA
pH	10/6/21 10:22	10/6/21 10:22			8.36	SU			FA
Temperature	10/6/21 10:22	10/6/21 10:22			22.40	C			FA
Turbidity	10/6/21 10:22	10/6/21 10:22			0.62	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/6/21 10:25
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BB18744

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18745	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.211	0.214	0.203	0.170 to 0.230	99.2	70.0 to 130	1.41	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18745	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	97.1	70.0 to 130	0.966	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/6/21 10:25
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-2VA

Laboratory ID Number: BB18744

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB18744	Solids, Dissolved	mg/L	1.00	25.0			326	50.0	40.0 to 60.0			1.40	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 10/6/21 12:46
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18745

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 12:14		1.015	0.532	mg/L	0.030000	0.1015	
* Calcium, Total	10/13/21 10:10	10/15/21 12:14		1.015	3.46	mg/L	0.070035	0.406	
* Iron, Total	10/13/21 10:10	10/15/21 12:14		1.015	0.536	mg/L	0.008120	0.0406	
* Lithium, Total	10/13/21 10:10	10/15/21 12:14		1.015	0.227	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/13/21 10:10	10/15/21 12:14		1.015	1.16	mg/L	0.021315	0.406	
* Sodium, Total	10/13/21 10:10	10/15/21 13:51		101.5	357	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/13/21 09:10	10/14/21 13:15		1.015	0.0126	mg/L	0.008120	0.0406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.000510	mg/L	0.000508	0.001015	J
* Arsenic, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.00162	mg/L	0.000068	0.000203	
* Barium, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.374	mg/L	0.000102	0.000203	
* Beryllium, Total	10/8/21 11:18	10/11/21 12:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.00111	mg/L	0.000203	0.001015	
* Cobalt, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.000205	mg/L	0.000068	0.000203	
* Lead, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.000225	mg/L	0.000068	0.000203	
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.00107	mg/L	0.000068	0.000203	
* Potassium, Total	10/8/21 11:18	10/11/21 12:44		1.015	1.08	mg/L	0.169505	0.5075	
* Manganese, Total	10/8/21 11:18	10/11/21 12:44		1.015	0.00930	mg/L	0.000068	0.000203	
* Selenium, Total	10/8/21 11:18	10/11/21 12:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/8/21 11:57	10/8/21 15:33		1.015	0.00586	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:46		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	549	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/12/21 11:15	10/13/21 12:56		1	864	mg/L		75.8	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-21VC

Location Code: WMWGADAP
Collected: 10/6/21 12:46
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18745

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	533	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	16.2	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:58	10/7/21 12:58		40	166	mg/L	20.00	40	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:53	10/13/21 12:53		3	8.34	mg/L	0.18	0.3	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:31	10/11/21 12:31		1	8.35	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/6/21 12:43	10/6/21 12:43			1478.62	uS/cm			FA
pH	10/6/21 12:43	10/6/21 12:43			8.53	SU			FA
Temperature	10/6/21 12:43	10/6/21 12:43			19.22	C			FA
Turbidity	10/6/21 12:43	10/6/21 12:43			9.3	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/6/21 12:46
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BB18745

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18745	Manganese, Dissolved	mg/L	-0.0000191	0.000147	0.100	0.103	0.104	0.101	0.0850 to 0.115	97.1	70.0 to 130	0.966	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18745	Iron, Dissolved	mg/L	-4.310E-05	0.0176	0.2	0.211	0.214	0.203	0.170 to 0.230	99.2	70.0 to 130	1.41	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/6/21 12:46
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond - MW-21VC

Laboratory ID Number: BB18745

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18744	Solids, Dissolved	mg/L	1.00	25.0			326	50.0	40.0 to 60.0			1.40	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-2

Location Code: WMWGADAPFB
Collected: 10/6/21 13:15
Customer ID:
Submittal Date: 10/7/21 10:17

Laboratory ID Number: BB18746

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/13/21 10:10	10/15/21 12:18		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/13/21 10:10	10/15/21 12:18		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/13/21 10:10	10/15/21 12:18		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/13/21 10:10	10/15/21 12:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/13/21 10:10	10/15/21 12:18		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/13/21 10:10	10/15/21 12:18		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/8/21 11:18	10/11/21 12:48		1.015	0.000230	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/8/21 11:18	10/11/21 12:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ABB***								
* Mercury, Total by CVAA	10/15/21 10:53	10/15/21 15:50		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/12/21 11:15	10/13/21 12:56		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/7/21 12:57	10/7/21 12:57		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 12:50	10/13/21 12:50		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/11/21 12:32	10/11/21 12:32		1	Not Detected	mg/L	0.50	1	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 10/6/21 13:15
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BB18746

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Selenium, Total	mg/L	0.0000698	0.00100	0.100	0.0976	0.0975	0.0973	0.0850 to 0.115	97.6	70.0 to 130	0.103	20.0
BB18746	Magnesium, Total	mg/L	-0.00772	0.0462	5.00	5.05	5.11	5.14	4.25 to 5.75	101	70.0 to 130	1.18	20.0
BB18746	Boron, Total	mg/L	-1.620E-05	0.0650	1.00	0.967	0.973	0.989	0.850 to 1.15	96.7	70.0 to 130	0.619	20.0
BB18746	Chromium, Total	mg/L	-0.0000170	0.000440	0.100	0.0979	0.0983	0.0988	0.0850 to 0.115	97.7	70.0 to 130	0.408	20.0
BB18746	Mercury, Total by CVAA	mg/L	5.000E-05	0.000500	0.004	0.0029	0.00311	0.00359	0.00340 to 0.00460	72.5	70.0 to 130	6.99	20.0
BB18746	Calcium, Total	mg/L	0.00499	0.152	5.00	5.04	5.08	5.12	4.25 to 5.75	101	70.0 to 130	0.791	20.0
BB18746	Antimony, Total	mg/L	0.000163	0.00100	0.100	0.0904	0.0913	0.0919	0.0850 to 0.115	90.4	70.0 to 130	0.991	20.0
BB18746	Cadmium, Total	mg/L	0.0000000	0.000147	0.100	0.0918	0.0935	0.0952	0.0850 to 0.115	91.8	70.0 to 130	1.83	20.0
BB18746	Arsenic, Total	mg/L	-0.0000050	0.000147	0.100	0.0998	0.0982	0.102	0.0850 to 0.115	99.8	70.0 to 130	1.62	20.0
BB18746	Molybdenum, Total	mg/L	0.0000224	0.000147	0.100	0.0936	0.0980	0.0962	0.0850 to 0.115	93.6	70.0 to 130	4.59	20.0
BB18746	Cobalt, Total	mg/L	-0.0000028	0.000147	0.100	0.0983	0.100	0.100	0.0850 to 0.115	98.3	70.0 to 130	1.71	20.0
BB18746	Potassium, Total	mg/L	0.00310	0.367	10.0	9.92	9.86	9.99	8.50 to 11.5	99.2	70.0 to 130	0.607	20.0
BB18746	Lithium, Total	mg/L	-5.480E-05	0.0154	0.200	0.193	0.196	0.198	0.170 to 0.230	96.5	70.0 to 130	1.54	20.0
BB18746	Lead, Total	mg/L	0.0000022	0.000147	0.100	0.105	0.102	0.102	0.0850 to 0.115	105	70.0 to 130	2.90	20.0
BB18746	Iron, Total	mg/L	0.000319	0.0176	0.2	0.201	0.203	0.203	0.170 to 0.230	100	70.0 to 130	0.990	20.0
BB18746	Beryllium, Total	mg/L	0.0000303	0.000880	0.100	0.0975	0.0886	0.0913	0.0850 to 0.115	97.5	70.0 to 130	9.56	20.0
BB18746	Thallium, Total	mg/L	0.0000035	0.000147	0.100	0.103	0.101	0.0961	0.0850 to 0.115	103	70.0 to 130	1.96	20.0
BB18746	Manganese, Total	mg/L	0.0000059	0.000147	0.100	0.0992	0.0986	0.101	0.0850 to 0.115	99.2	70.0 to 130	0.607	20.0
BB18746	Barium, Total	mg/L	0.0000090	0.000200	0.100	0.0965	0.100	0.0995	0.0850 to 0.115	96.5	70.0 to 130	3.56	20.0
BB18746	Sodium, Total	mg/L	0.00361	0.0660	5.00	4.88	4.93	5.00	4.25 to 5.75	97.6	70.0 to 130	1.02	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 10/6/21 13:15
Customer ID:
Delivery Date: 10/7/21 10:17

Description: Gadsden Ash Pond Field Blank-2

Laboratory ID Number: BB18746

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18746	Chloride	mg/L	0.0118	1.00	10.0	9.96	0.0703	10.1	9.00 to 11.0	99.6	80.0 to 120	0.00	20.0
BB18746	Fluoride	mg/L	0.026	0.100	2.50	2.72	0.0256	2.62	2.25 to 2.75	109	80.0 to 120	0.00	20.0
BB18744	Solids, Dissolved	mg/L	1.00	25.0			326	50.0	40.0 to 60.0			1.40	10.0
BB18746	Sulfate	mg/L	0.312	1.00	20.0	20.0	0.414	19.6	18.0 to 22.0	100	80.0 to 120	0.00	20.0

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 10/11/21 11:37
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18995

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 09:58		1.015	0.378	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 09:58		1.015	9.35	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 09:58		1.015	0.102	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 09:58		1.015	0.0544	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/21/21 12:00	10/22/21 09:58		1.015	2.05	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 13:39		10.15	85.5	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 09:54		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.00167	mg/L	0.000508	0.001015	
* Arsenic, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.00408	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.238	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 17:40		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.000412	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/13/21 14:45	10/14/21 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.00538	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.586	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 17:40		1.015	0.0151	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 17:40		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 17:40		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:33		1.015	0.0147	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:29		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	231	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	230	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-22VB

Location Code: WMWGADAP
Collected: 10/11/21 11:37
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18995

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	226	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	4.87	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	10/14/21 11:12	10/14/21 11:12		1	1.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	10/13/21 13:45	10/13/21 13:45		1	1.43	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	10/20/21 13:00	10/20/21 13:00		1	13.8	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	10/11/21 11:34	10/11/21 11:34			370.58	uS/cm			FA
pH	10/11/21 11:34	10/11/21 11:34			8.13	SU			FA
Temperature	10/11/21 11:34	10/11/21 11:34			18.07	C			FA
Turbidity	10/11/21 11:34	10/11/21 11:34			2.76	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/11/21 11:37
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BB18995

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/11/21 11:37
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-22VB

Laboratory ID Number: BB18995

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 10/11/21 12:57
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18996

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:01		1.015	0.328	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 10:01		1.015	40.0	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:01		1.015	2.14	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:01		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:01		1.015	8.00	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:01		1.015	14.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 09:58		1.015	1.92	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 17:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.000846	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.170	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 17:44		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.000124	mg/L	0.000068	0.000203	J
* Chromium, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.000475	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.00579	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.000155	mg/L	0.000068	0.000203	J
* Molybdenum, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.000118	mg/L	0.000068	0.000203	J
* Potassium, Total	10/13/21 14:45	10/14/21 17:44		1.015	0.999	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 17:44		1.015	1.01	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 17:44		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 17:44		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:37		1.015	1.01	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:33		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	95.6	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	202	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-19H

Location Code: WMWGADAP
Collected: 10/11/21 12:57
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18996

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	95.6	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.02	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:13	10/14/21 11:13		1	7.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:46	10/13/21 13:46		1	0.0779	mg/L	0.06	0.1	J
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:01	10/20/21 13:01		2	61.7	mg/L	1.00	2	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/11/21 12:54	10/11/21 12:54			315.23	uS/cm			FA
pH	10/11/21 12:54	10/11/21 12:54			6.08	SU			FA
Temperature	10/11/21 12:54	10/11/21 12:54			24.19	C			FA
Turbidity	10/11/21 12:54	10/11/21 12:54			7.48	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/11/21 12:57
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BB18996

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/11/21 12:57
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-19H

Laboratory ID Number: BB18996

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 10/11/21 14:49
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18997

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:04		1.015	0.459	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 13:42		10.15	87.1	mg/L	0.70035	4.06	
* Iron, Total	10/21/21 12:00	10/22/21 13:42		10.15	6.30	mg/L	0.08120	0.406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:04		1.015	0.0225	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/21/21 12:00	10/22/21 10:04		1.015	11.2	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:04		1.015	5.42	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 13:06		10.15	6.02	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 17:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.424	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.0807	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 17:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.000479	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.0165	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.0000928	mg/L	0.000068	0.000203	J
* Molybdenum, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.0204	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 17:48		1.015	7.84	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 19:17		5.075	5.30	mg/L	0.000340	0.001015	
* Selenium, Total	10/13/21 14:45	10/14/21 17:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 17:48		1.015	0.000294	mg/L	0.000068	0.000203	
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:52		5.075	5.19	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:37		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	175	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	337	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2

Location Code: WMWGADAP
Collected: 10/11/21 14:49
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18997

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	175	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.12	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:14	10/14/21 11:14		1	2.43	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:47	10/13/21 13:47		1	0.283	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:02	10/20/21 13:02		5	112	mg/L	2.50	5	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/11/21 14:46	10/11/21 14:46			524.27	uS/cm			FA
pH	10/11/21 14:46	10/11/21 14:46			6.59	SU			FA
Temperature	10/11/21 14:46	10/11/21 14:46			21.20	C			FA
Turbidity	10/11/21 14:46	10/11/21 14:46			6.7	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/11/21 14:49
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BB18997

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/11/21 14:49
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-2

Laboratory ID Number: BB18997

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Field Blank-3

Location Code: WMWGADAPFB
Collected: 10/11/21 15:15
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18998

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:08		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 10:08		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/21/21 12:00	10/22/21 10:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/21/21 12:00	10/22/21 10:08		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:08		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/21/21 12:00	10/22/21 10:08		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/13/21 14:45	10/14/21 17:51		1.015	0.0000787	mg/L	0.000068	0.000203	J
* Potassium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 17:51		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:41		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:15	10/14/21 11:15		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:49	10/13/21 13:49		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:03	10/20/21 13:03		1	Not Detected	mg/L	0.50	1	U

MDL's and RL's are adjusted for sample dilution, as applicable

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPFB
Sample Date: 10/11/21 15:15
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BB18998

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0

Comments:

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPFB
Sample Date: 10/11/21 15:15
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond Field Blank-3

Laboratory ID Number: BB18998

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0

Comments:

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 10/12/21 09:28
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:11		1.015	0.617	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 10:11		1.015	3.96	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:11		1.015	0.181	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:11		1.015	0.129	mg/L	0.007105	0.01999956	
* Magnesium, Total	10/21/21 12:00	10/22/21 10:11		1.015	1.33	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 13:46		101.5	222	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:05		1.015	0.0290	mg/L	0.008120	0.0406	J
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 17:55		1.015	0.000426	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 17:55		1.015	0.242	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 17:55		1.015	0.000353	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 17:55		1.015	0.00156	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 17:55		1.015	1.06	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 17:55		1.015	0.0396	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:44		1.015	0.0415	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:45		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	406	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	536	mg/L		50	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-2VB

Location Code: WMWGADAP
Collected: 10/12/21 09:28
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB18999

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	394	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	12.3	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:26	10/14/21 11:26		4	38.0	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:50	10/13/21 13:50		2	5.97	mg/L	0.12	0.2	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:04	10/20/21 13:04		1	15.2	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/12/21 09:25	10/12/21 09:25			901.38	uS/cm			FA
pH	10/12/21 09:25	10/12/21 09:25			8.62	SU			FA
Temperature	10/12/21 09:25	10/12/21 09:25			19.31	C			FA
Turbidity	10/12/21 09:25	10/12/21 09:25			4.01	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 09:28
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BB18999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 09:28
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-2VB

Laboratory ID Number: BB18999

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 10/12/21 11:17
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19000

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:15		1.015	0.0717	mg/L	0.030000	0.1015	J
* Calcium, Total	10/21/21 12:00	10/22/21 10:15		1.015	10.3	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/21/21 12:00	10/22/21 10:15		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:15		1.015	4.15	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:15		1.015	4.44	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:08		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 17:58		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.000190	mg/L	0.000068	0.000203	J
* Barium, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.0298	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 17:58		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.000209	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.000615	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.921	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.0254	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 17:58		1.015	0.000679	mg/L	0.000508	0.001015	J
* Thallium, Total	10/13/21 14:45	10/14/21 17:58		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:48		1.015	0.0258	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:49		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/15/21 10:30	10/15/21 11:41		1	4.00	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	78.7	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-18H

Location Code: WMWGADAP
Collected: 10/12/21 11:17
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19000

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	4.00	mg/L			
Carbonate Alkalinity, (calc.)	10/15/21 10:30	10/15/21 11:41		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:18	10/14/21 11:18		1	4.59	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:51	10/13/21 13:51		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:06	10/20/21 13:06		1	36.7	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/12/21 11:14	10/12/21 11:14			115.05	uS/cm			FA
pH	10/12/21 11:14	10/12/21 11:14			5.12	SU			FA
Temperature	10/12/21 11:14	10/12/21 11:14			17.56	C			FA
Turbidity	10/12/21 11:14	10/12/21 11:14			1.54	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 11:17
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BB19000

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 11:17
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-18H

Laboratory ID Number: BB19000

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19000	Alkalinity, Total as CaCO3	mg/L					4.20	50.9	45.0 to 55.0			4.88	10.0
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 10/12/21 12:16
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19001

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:18		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 10:18		1.015	2.94	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:18		1.015	0.0164	mg/L	0.008120	0.0406	J
* Lithium, Total	10/21/21 12:00	10/22/21 10:18		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:18		1.015	1.10	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:18		1.015	3.68	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:11		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/13/21 14:45	10/14/21 18:02		1.015	0.0494	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:02		1.015	0.0000842	mg/L	0.000068	0.000203	J
* Chromium, Total	10/13/21 14:45	10/14/21 18:02		1.015	0.000337	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:02		1.015	0.0000808	mg/L	0.000068	0.000203	J
* Lead, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/13/21 14:45	10/14/21 18:02		1.015	0.549	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 18:02		1.015	0.0125	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:51		1.015	0.00663	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:53		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	23.7	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	38.7	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-5

Location Code: WMWGADAP
Collected: 10/12/21 12:16
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19001

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	23.7	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.00	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	10/14/21 11:19	10/14/21 11:19		1	4.07	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	10/13/21 13:52	10/13/21 13:52		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	10/20/21 13:07	10/20/21 13:07		1	0.895	mg/L	0.50	1	J
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	10/12/21 12:13	10/12/21 12:13			41.42	uS/cm			FA
pH	10/12/21 12:13	10/12/21 12:13			5.33	SU			FA
Temperature	10/12/21 12:13	10/12/21 12:13			17.84	C			FA
Turbidity	10/12/21 12:13	10/12/21 12:13			2.08	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 12:16
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BB19001

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 12:16
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - PZ-5

Laboratory ID Number: BB19001

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0
BB18997	Solids, Dissolved	mg/L	0.0000	25.0			342	50.0	40.0 to 60.0			0.736	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 10/12/21 13:40
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19002

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:21		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 10:21		1.015	3.29	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:21		1.015	0.0571	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:21		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:21		1.015	1.07	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:21		1.015	3.74	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:15		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/13/21 14:45	10/14/21 18:06		1.015	0.0303	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:06		1.015	0.000307	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:06		1.015	0.000142	mg/L	0.000068	0.000203	J
* Lead, Total	10/13/21 14:45	10/14/21 18:06		1.015	0.000119	mg/L	0.000068	0.000203	J
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/13/21 14:45	10/14/21 18:06		1.015	0.507	mg/L	0.169505	0.5075	J
* Manganese, Total	10/13/21 14:45	10/14/21 18:06		1.015	0.00422	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:55		1.015	0.00377	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 17:57		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	23.6	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	35.3	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - PZ-6

Location Code: WMWGADAP
Collected: 10/12/21 13:40
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19002

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	23.6	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.00	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:20	10/14/21 11:20		1	3.68	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:53	10/13/21 13:53		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:08	10/20/21 13:08		1	1.34	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	10/12/21 13:37	10/12/21 13:37			42.98	uS/cm			FA
pH	10/12/21 13:37	10/12/21 13:37			5.41	SU			FA
Temperature	10/12/21 13:37	10/12/21 13:37			19.58	C			FA
Turbidity	10/12/21 13:37	10/12/21 13:37			6.06	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 13:40
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BB19002

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 13:40
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - PZ-6

Laboratory ID Number: BB19002

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 10/11/21 12:40
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19003

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:25		1.015	0.0596	mg/L	0.030000	0.1015	J
* Calcium, Total	10/21/21 12:00	10/22/21 10:25		1.015	23.0	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:25		1.015	0.452	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:25		1.015	0.0198	mg/L	0.007105	0.01999956	J
* Magnesium, Total	10/21/21 12:00	10/22/21 10:25		1.015	5.50	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 13:49		10.15	58.5	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:18		1.015	0.425	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:09		1.015	0.000366	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:09		1.015	0.483	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:09		1.015	0.000314	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:09		1.015	0.00173	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 18:09		1.015	0.865	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 18:09		1.015	0.0485	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 10:58		1.015	0.0480	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:01		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	236	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	220	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-4V

Location Code: WMWGADAP
Collected: 10/11/21 12:40
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19003

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	234	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	2.10	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:21	10/14/21 11:21		1	5.65	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:55	10/13/21 13:55		1	0.230	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:09	10/20/21 13:09		1	1.70	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/11/21 12:34	10/11/21 12:34			439.07	uS/cm			FA
pH	10/11/21 12:34	10/11/21 12:34			7.82	SU			FA
Temperature	10/11/21 12:34	10/11/21 12:34			19.61	C			FA
Turbidity	10/11/21 12:34	10/11/21 12:34			1.17	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/11/21 12:40
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BB19003

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/11/21 12:40
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-4V

Laboratory ID Number: BB19003

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 10/11/21 13:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19004

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:28		1.015	0.504	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 13:53		10.15	63.4	mg/L	0.70035	4.06	
* Iron, Total	10/21/21 12:00	10/22/21 10:28		1.015	2.87	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:28		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:28		1.015	18.3	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:28		1.015	17.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:21		1.015	2.40	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.00191	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.134	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.000246	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.00995	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.0000819	mg/L	0.000068	0.000203	J
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.000312	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 18:13		1.015	3.00	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 19:21		92.365	31.9	mg/L	0.006188	0.018473	RA
* Selenium, Total	10/13/21 14:45	10/14/21 18:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:13		1.015	0.000130	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:56		92.365	32.1	mg/L	0.006188	0.018473	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:05		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	140	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	384	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-20H

Location Code: WMWGADAP
Collected: 10/11/21 13:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19004

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	140	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.05	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:23	10/14/21 11:23		1	6.37	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 13:56	10/13/21 13:56		1	0.127	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:10	10/20/21 13:10		16	174	mg/L	8.00	16	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/11/21 13:25	10/11/21 13:25			672.64	uS/cm			FA
pH	10/11/21 13:25	10/11/21 13:25			6.36	SU			FA
Temperature	10/11/21 13:25	10/11/21 13:25			19.78	C			FA
Turbidity	10/11/21 13:25	10/11/21 13:25			8.97	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/11/21 13:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BB19004

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Potassium, Total	mg/L	-0.00835	0.367	10.0	13.1	13.3	10.4	8.50 to 11.5	101	70.0 to 130	1.52	20.0
BB19004	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0995	0.102	0.102	0.0850 to 0.115	99.5	70.0 to 130	2.48	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19004	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.0041	0.00411	0.00406	0.00340 to 0.00460	102	70.0 to 130	0.244	20.0
BB19004	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.103	0.101	0.103	0.0850 to 0.115	101	70.0 to 130	1.96	20.0
BB19004	Boron, Total	mg/L	0.00185	0.0650	1.00	1.52	1.53	1.01	0.850 to 1.15	102	70.0 to 130	0.656	20.0
BB19004	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0978	0.0964	0.0973	0.0850 to 0.115	97.5	70.0 to 130	1.44	20.0
BB19004	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.101	0.100	0.105	0.0850 to 0.115	101	70.0 to 130	0.995	20.0
BB19004	Iron, Total	mg/L	0.00115	0.0176	0.2	3.06	3.04	0.203	0.170 to 0.230	95.0	70.0 to 130	0.656	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19004	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0974	0.0981	0.0993	0.0850 to 0.115	97.2	70.0 to 130	0.716	20.0
BB19004	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19004	Magnesium, Total	mg/L	0.00137	0.0462	5.00	23.3	23.3	5.13	4.25 to 5.75	100	70.0 to 130	0.00	20.0
BB19004	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.0998	0.102	0.102	0.0850 to 0.115	99.8	70.0 to 130	2.18	20.0
BB19004	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.219	0.220	0.200	0.170 to 0.230	110	70.0 to 130	0.456	20.0
BB19004	Calcium, Total	mg/L	0.00219	0.152	5.00	69.3	67.7	5.05	4.25 to 5.75	118	70.0 to 130	2.34	20.0
BB19004	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0949	0.0935	0.0987	0.0850 to 0.115	94.8	70.0 to 130	1.49	20.0
BB19004	Sodium, Total	mg/L	0.000246	0.0660	5.00	23.0	23.1	5.04	4.25 to 5.75	112	70.0 to 130	0.434	20.0
BB19004	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.236	0.236	0.0970	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BB19004	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	30.6	31.2	0.0985	0.0850 to 0.115	-1300	70.0 to 130	1.94	20.0
BB19004	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0999	0.100	0.0965	0.0850 to 0.115	99.9	70.0 to 130	0.100	20.0
BB19004	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.107	0.108	0.101	0.0850 to 0.115	97.0	70.0 to 130	0.930	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/11/21 13:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-20H

Laboratory ID Number: BB19004

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19004	Sulfate	mg/L	-0.00907	1.00	320	533	175	19.7	18.0 to 22.0	112	80.0 to 120	0.573	20.0
BB19004	Chloride	mg/L	0.000283	1.00	10.0	16.4	6.36	9.96	9.00 to 11.0	100	80.0 to 120	0.157	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0
BB19004	Fluoride	mg/L	0.0194	0.100	2.50	2.78	0.128	2.61	2.25 to 2.75	106	80.0 to 120	0.784	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 10/11/21 14:40
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19005

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:45		1.015	0.0900	mg/L	0.030000	0.1015	J
* Calcium, Total	10/21/21 12:00	10/22/21 10:45		1.015	38.2	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 14:03		10.15	21.6	mg/L	0.08120	0.406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:45		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:45		1.015	6.18	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:45		1.015	12.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 13:09		10.15	21.2	mg/L	0.08120	0.406	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.00370	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.292	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:34		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.000285	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.000886	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.000451	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.585	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 18:34		1.015	0.689	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:34		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:34		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:05		1.015	0.692	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:32		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	151	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	190	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-10

Location Code: WMWGADAP
Collected: 10/11/21 14:40
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19005

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D		***Analyst: JAG***							
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	151	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.11	mg/L			
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	10/14/21 11:36	10/14/21 11:36		1	5.72	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	10/13/21 14:08	10/13/21 14:08		1	0.201	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	10/20/21 13:28	10/20/21 13:28		1	7.75	mg/L	0.50	1	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	10/11/21 14:37	10/11/21 14:37			371.08	uS/cm			FA
pH	10/11/21 14:37	10/11/21 14:37			6.72	SU			FA
Temperature	10/11/21 14:37	10/11/21 14:37			20.11	C			FA
Turbidity	10/11/21 14:37	10/11/21 14:37			2.95	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/11/21 14:40
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BB19005

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19005	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	0.790	0.786	0.102	0.0850 to 0.115	98.0	70.0 to 130	0.508	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19005	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	21.3	21.0	0.202	0.170 to 0.230	50.0	70.0 to 130	1.42	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/11/21 14:40
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-10

Laboratory ID Number: BB19005

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 10/12/21 08:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19006

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:48		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 10:48		1.015	11.8	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:48		1.015	0.0140	mg/L	0.008120	0.0406	J
* Lithium, Total	10/21/21 12:00	10/22/21 10:48		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:48		1.015	4.39	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:48		1.015	2.29	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:42		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.00131	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.0268	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.00115	mg/L	0.000406	0.001015	
* Cadmium, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.000587	mg/L	0.000068	0.000203	
* Chromium, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.000593	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.0291	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.00156	mg/L	0.000068	0.000203	
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.383	mg/L	0.169505	0.5075	J
* Manganese, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.393	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:38		1.015	0.00287	mg/L	0.000508	0.001015	
* Thallium, Total	10/13/21 14:45	10/14/21 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:27		1.015	0.394	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	142	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:37	10/14/21 11:37		1	2.87	mg/L	0.50	1	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19006 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14

Location Code: WMWGADAP
Collected: 10/12/21 08:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19006

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	10/13/21 14:09	10/13/21 14:09		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	10/20/21 13:39	10/20/21 13:39		5	95.7	mg/L	2.50	5	
Analytical Method: Field Measurements		***Analyst: TJD***							
Conductivity	10/12/21 08:28	10/12/21 08:28			276.99	uS/cm			FA
pH	10/12/21 08:28	10/12/21 08:28			4.04	SU			FA
Temperature	10/12/21 08:28	10/12/21 08:28			19.12	C			FA
Turbidity	10/12/21 08:28	10/12/21 08:28			2.99	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19006 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 08:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BB19006

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19010	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	1.13	1.13	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19010	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	13.2	13.7	0.202	0.170 to 0.230	-150	70.0 to 130	3.72	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19006 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 08:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-14

Laboratory ID Number: BB19006

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19006 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14 DUP

Location Code: WMWGADAP
Collected: 10/12/21 08:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19007

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:52		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 10:52		1.015	11.8	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:52		1.015	0.0149	mg/L	0.008120	0.0406	J
* Lithium, Total	10/21/21 12:00	10/22/21 10:52		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:52		1.015	4.38	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:52		1.015	2.28	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:45		1.015	Not Detected	mg/L	0.008120	0.0406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.00137	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.0286	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.00117	mg/L	0.000406	0.001015	
* Cadmium, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.000505	mg/L	0.000068	0.000203	
* Chromium, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.000610	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.0288	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.00151	mg/L	0.000068	0.000203	
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Potassium, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.355	mg/L	0.169505	0.5075	J
* Manganese, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.393	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:41		1.015	0.00291	mg/L	0.000508	0.001015	
* Thallium, Total	10/13/21 14:45	10/14/21 18:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:30		1.015	0.409	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:40		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	132	mg/L		25	
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:38	10/14/21 11:38		1	2.89	mg/L	0.50	1	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19007 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-14 DUP

Location Code: WMWGADAP
Collected: 10/12/21 08:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19007

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 14:10	10/13/21 14:10		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:40	10/20/21 13:40		5	88.9	mg/L	2.50	5	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/12/21 08:28	10/12/21 08:28			276.99	uS/cm			FA
pH	10/12/21 08:28	10/12/21 08:28			4.04	SU			FA
Temperature	10/12/21 08:28	10/12/21 08:28			19.12	C			FA
Turbidity	10/12/21 08:28	10/12/21 08:28			2.99	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19007 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 08:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-14 DUP

Laboratory ID Number: BB19007

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19010	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	1.13	1.13	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0
BB19010	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	13.2	13.7	0.202	0.170 to 0.230	-150	70.0 to 130	3.72	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19007 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 08:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-14 DUP

Laboratory ID Number: BB19007

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified. Sample BB19007 was not analyzed for Alkalinity due to the initial sample pH reading was below the Alkalinity titration end point of 4.5 SU. Fluoride result is qualified due to potential matrix interference.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 10/12/21 10:48
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19008

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:55		1.015	0.0462	mg/L	0.030000	0.1015	J
* Calcium, Total	10/21/21 12:00	10/22/21 14:06		10.15	66.3	mg/L	0.70035	4.06	
* Iron, Total	10/21/21 12:00	10/22/21 14:06		10.15	8.84	mg/L	0.08120	0.406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:55		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:55		1.015	6.51	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:55		1.015	9.59	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 13:19		10.15	8.40	mg/L	0.08120	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:45		1.015	0.00287	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:45		1.015	0.203	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/13/21 14:45	10/14/21 18:45		1.015	0.00298	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:45		1.015	0.000319	mg/L	0.000068	0.000203	
* Potassium, Total	10/13/21 14:45	10/14/21 18:45		1.015	0.446	mg/L	0.169505	0.5075	J
* Manganese, Total	10/13/21 14:45	10/14/21 19:35		5.075	2.00	mg/L	0.000340	0.001015	
* Selenium, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:59		5.075	1.96	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:44		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	202	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	245	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-8

Location Code: WMWGADAP
Collected: 10/12/21 10:48
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19008

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	202	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.12	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:40	10/14/21 11:40		1	5.60	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 14:12	10/13/21 14:12		1	0.123	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:32	10/20/21 13:32		1	16.0	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/12/21 10:45	10/12/21 10:45			441.79	uS/cm			FA
pH	10/12/21 10:45	10/12/21 10:45			6.61	SU			FA
Temperature	10/12/21 10:45	10/12/21 10:45			18.42	C			FA
Turbidity	10/12/21 10:45	10/12/21 10:45			5.89	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 10:48
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BB19008

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19010	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	1.13	1.13	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19010	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	13.2	13.7	0.202	0.170 to 0.230	-150	70.0 to 130	3.72	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 10:48
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-8

Laboratory ID Number: BB19008

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 10/12/21 11:55
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19009

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 10:59		1.015	0.0632	mg/L	0.030000	0.1015	J
* Calcium, Total	10/21/21 12:00	10/22/21 10:59		1.015	35.4	mg/L	0.070035	0.406	
* Iron, Total	10/21/21 12:00	10/22/21 10:59		1.015	1.33	mg/L	0.008120	0.0406	
* Lithium, Total	10/21/21 12:00	10/22/21 10:59		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 10:59		1.015	6.76	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 10:59		1.015	13.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 10:52		1.015	1.27	mg/L	0.008120	0.0406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:49		1.015	0.000635	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:49		1.015	0.147	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:49		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:49		1.015	0.000310	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:49		1.015	0.00113	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:49		1.015	0.000177	mg/L	0.000068	0.000203	J
* Potassium, Total	10/13/21 14:45	10/14/21 18:49		1.015	1.80	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 19:39		5.075	1.50	mg/L	0.000340	0.001015	
* Selenium, Total	10/13/21 14:45	10/14/21 18:49		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:49		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 12:03		5.075	1.49	mg/L	0.000340	0.001015	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:48		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	117	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	169	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-9

Location Code: WMWGADAP
Collected: 10/12/21 11:55
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19009

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	117	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.13	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:41	10/14/21 11:41		1	7.78	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 14:13	10/13/21 14:13		1	0.147	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:33	10/20/21 13:33		1	18.0	mg/L	0.50	1	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/12/21 11:51	10/12/21 11:51			313.11	uS/cm			FA
pH	10/12/21 11:51	10/12/21 11:51			6.90	SU			FA
Temperature	10/12/21 11:51	10/12/21 11:51			18.97	C			FA
Turbidity	10/12/21 11:51	10/12/21 11:51			2.25	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 11:55
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BB19009

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19010	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	1.13	1.13	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19010	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	13.2	13.7	0.202	0.170 to 0.230	-150	70.0 to 130	3.72	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 11:55
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-9

Laboratory ID Number: BB19009

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 10/12/21 12:55
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19010

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:02		1.015	0.125	mg/L	0.030000	0.1015	
* Calcium, Total	10/21/21 12:00	10/22/21 14:09		10.15	78.6	mg/L	0.70035	4.06	
* Iron, Total	10/21/21 12:00	10/22/21 14:09		10.15	13.6	mg/L	0.08120	0.406	
* Lithium, Total	10/21/21 12:00	10/22/21 11:02		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 11:02		1.015	11.4	mg/L	0.021315	0.406	
* Sodium, Total	10/21/21 12:00	10/22/21 11:02		1.015	13.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: RDA***								
* Iron, Dissolved	10/20/21 14:00	10/21/21 13:23		10.15	13.5	mg/L	0.08120	0.406	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:52		1.015	0.00272	mg/L	0.000068	0.000203	
* Barium, Total	10/13/21 14:45	10/14/21 18:52		1.015	0.170	mg/L	0.000102	0.000203	
* Beryllium, Total	10/13/21 14:45	10/14/21 18:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:52		1.015	0.000267	mg/L	0.000203	0.001015	J
* Cobalt, Total	10/13/21 14:45	10/14/21 18:52		1.015	0.000275	mg/L	0.000068	0.000203	
* Lead, Total	10/13/21 14:45	10/14/21 18:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:52		1.015	0.000152	mg/L	0.000068	0.000203	J
* Potassium, Total	10/13/21 14:45	10/14/21 18:52		1.015	1.30	mg/L	0.169505	0.5075	
* Manganese, Total	10/13/21 14:45	10/14/21 18:52		1.015	0.983	mg/L	0.000068	0.000203	
* Selenium, Total	10/13/21 14:45	10/14/21 18:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Manganese, Dissolved	10/13/21 14:19	10/14/21 11:41		1.015	1.03	mg/L	0.000068	0.000203	
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:52		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2320 B	***Analyst: JAG***								
Alkalinity, Total as CaCO3	10/20/21 09:45	10/20/21 10:40		1	154	mg/L		0.1	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	352	mg/L		25	

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond - MW-11

Location Code: WMWGADAP
Collected: 10/12/21 12:55
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19010

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 4500CO2 D	***Analyst: JAG***								
Bicarbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	154	mg/L			
Carbonate Alkalinity, (calc.)	10/20/21 09:45	10/20/21 10:40		1	0.08	mg/L			
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:42	10/14/21 11:42		1	5.80	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 14:14	10/13/21 14:14		1	0.134	mg/L	0.06	0.1	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:41	10/20/21 13:41		8	142	mg/L	4.00	8	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	10/12/21 12:52	10/12/21 12:52			577.54	uS/cm			FA
pH	10/12/21 12:52	10/12/21 12:52			6.66	SU			FA
Temperature	10/12/21 12:52	10/12/21 12:52			19.95	C			FA
Turbidity	10/12/21 12:52	10/12/21 12:52			7.01	NTU			FA

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAP
Sample Date: 10/12/21 12:55
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BB19010

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19010	Manganese, Dissolved	mg/L	-0.0000354	0.000147	0.100	1.13	1.13	0.102	0.0850 to 0.115	100	70.0 to 130	0.00	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19010	Iron, Dissolved	mg/L	3.760E-05	0.0176	0.2	13.2	13.7	0.202	0.170 to 0.230	-150	70.0 to 130	3.72	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAP
Sample Date: 10/12/21 12:55
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond - MW-11

Laboratory ID Number: BB19010

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19010	Alkalinity, Total as CaCO3	mg/L					153	50.9	45.0 to 55.0			0.651	10.0

Comments: The client submitted filtered samples for dissolved analysis, but no MB or LCS were submitted. Therefore, dissolved data is qualified.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Certificate Of Analysis

Alabama Power

Description: Gadsden Ash Pond Equipment Blank-1

Location Code: WMWGADAPEB
Collected: 10/12/21 13:30
Customer ID:
Submittal Date: 10/13/21 09:46

Laboratory ID Number: BB19011

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: RDA***				***Preparation Method: EPA 1638***				
* Boron, Total	10/21/21 12:00	10/22/21 11:05		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	10/21/21 12:00	10/22/21 11:05		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	10/21/21 12:00	10/22/21 11:05		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	10/21/21 12:00	10/22/21 11:05		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	10/21/21 12:00	10/22/21 11:05		1.015	Not Detected	mg/L	0.021315	0.406	U
* Sodium, Total	10/21/21 12:00	10/22/21 11:05		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Arsenic, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Barium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Beryllium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Molybdenum, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	10/13/21 14:45	10/14/21 18:56		1.015	0.0000783	mg/L	0.000068	0.000203	J
* Potassium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	10/13/21 14:45	10/14/21 18:56		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: CRB***								
* Mercury, Total by CVAA	10/19/21 13:32	10/19/21 18:56		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	10/14/21 10:52	10/15/21 13:04		1	Not Detected	mg/L		25	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	10/14/21 11:43	10/14/21 11:43		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	10/13/21 14:15	10/13/21 14:15		1	Not Detected	mg/L	0.06	0.1	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	10/20/21 13:35	10/20/21 13:35		1	0.645	mg/L	0.50	1	J

MDL's and RL's are adjusted for sample dilution, as applicable

Comments: Sulfate precision is invalid due to sample concentration.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Batch QC Summary

Alabama Power

Customer Account: WMWGADAPEB
Sample Date: 10/12/21 13:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BB19011

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Iron, Total	mg/L	0.00115	0.0176	0.2	0.205	0.248	0.203	0.170 to 0.230	102	70.0 to 130	19.0	20.0
BB19011	Barium, Total	mg/L	0.0000000	0.000200	0.100	0.102	0.0996	0.0970	0.0850 to 0.115	102	70.0 to 130	2.38	20.0
BB19011	Manganese, Total	mg/L	-0.0000042	0.000147	0.100	0.0985	0.0960	0.0985	0.0850 to 0.115	98.4	70.0 to 130	2.57	20.0
BB19011	Cadmium, Total	mg/L	0.0000114	0.000147	0.100	0.101	0.0999	0.102	0.0850 to 0.115	101	70.0 to 130	1.10	20.0
BB19011	Lithium, Total	mg/L	-3.720E-05	0.0154	0.200	0.201	0.201	0.200	0.170 to 0.230	100	70.0 to 130	0.00	20.0
BB19011	Magnesium, Total	mg/L	0.00137	0.0462	5.00	5.16	5.12	5.13	4.25 to 5.75	103	70.0 to 130	0.778	20.0
BB19011	Lead, Total	mg/L	0.0000123	0.000147	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Potassium, Total	mg/L	-0.00835	0.367	10.0	10.4	10.1	10.4	8.50 to 11.5	104	70.0 to 130	2.93	20.0
BB19011	Mercury, Total by CVAA	mg/L	6.000E-05	0.000500	0.004	0.00405	0.00414	0.00399	0.00340 to 0.00460	101	70.0 to 130	2.20	20.0
BB19011	Molybdenum, Total	mg/L	0.0000340	0.000147	0.100	0.0985	0.0983	0.0973	0.0850 to 0.115	98.5	70.0 to 130	0.203	20.0
BB19011	Chromium, Total	mg/L	-0.0000467	0.000440	0.100	0.0984	0.0963	0.0993	0.0850 to 0.115	98.4	70.0 to 130	2.16	20.0
BB19011	Arsenic, Total	mg/L	-0.0000440	0.000147	0.100	0.0973	0.0991	0.103	0.0850 to 0.115	97.3	70.0 to 130	1.83	20.0
BB19011	Cobalt, Total	mg/L	0.0000042	0.000147	0.100	0.100	0.0982	0.101	0.0850 to 0.115	100	70.0 to 130	1.82	20.0
BB19011	Calcium, Total	mg/L	0.00219	0.152	5.00	5.09	5.10	5.05	4.25 to 5.75	102	70.0 to 130	0.196	20.0
BB19011	Selenium, Total	mg/L	0.0000000	0.00100	0.100	0.0997	0.102	0.102	0.0850 to 0.115	99.7	70.0 to 130	2.28	20.0
BB19011	Beryllium, Total	mg/L	0.0000297	0.000880	0.100	0.103	0.102	0.105	0.0850 to 0.115	103	70.0 to 130	0.976	20.0
BB19011	Thallium, Total	mg/L	-0.0000007	0.000147	0.100	0.0969	0.0956	0.0987	0.0850 to 0.115	96.9	70.0 to 130	1.35	20.0
BB19011	Sodium, Total	mg/L	0.000246	0.0660	5.00	5.05	5.03	5.04	4.25 to 5.75	101	70.0 to 130	0.397	20.0
BB19011	Boron, Total	mg/L	0.00185	0.0650	1.00	1.01	1.01	1.01	0.850 to 1.15	101	70.0 to 130	0.00	20.0
BB19011	Antimony, Total	mg/L	0.000138	0.00100	0.100	0.0988	0.0967	0.0965	0.0850 to 0.115	98.8	70.0 to 130	2.15	20.0

Comments: Sulfate precision is invalid due to sample concentration.

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040

Alabama Power

Batch QC Summary

Customer Account: WMWGADAPEB
Sample Date: 10/12/21 13:30
Customer ID:
Delivery Date: 10/13/21 09:46

Description: Gadsden Ash Pond Equipment Blank-1

Laboratory ID Number: BB19011

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BB19011	Fluoride	mg/L	0.0275	0.100	2.50	2.61	0.0253	2.28	2.25 to 2.75	104	80.0 to 120	0.00	20.0
BB19011	Sulfate	mg/L	-0.210	1.00	20.0	18.9	-0.732	19.2	18.0 to 22.0	91.3	80.0 to 120	3160	20.0
BB19011	Chloride	mg/L	-0.00836	1.00	10.0	10.0	0.0829	10.0	9.00 to 11.0	100	80.0 to 120	0.00	20.0
BB19010	Solids, Dissolved	mg/L	0.0000	25.0			351	50.0	40.0 to 60.0			0.142	10.0

Comments: Sulfate precision is invalid due to sample concentration.

Reported: 11/19/2021
Version: 3.4
COA_CCR

Alabama Power
General Test Laboratory
744 County Road 87, GSC #8
Calera, AL 35040
(205) 664-6001

Definitions

Alabama Power

Project Number: WMWGADAP_1341

Abbreviation	Description
DF	Dilution Factor
LCS	Lab Control Sample
LFM	Lab Fortified Matrix
MB	Method Blank
MDL	Method Detection Limit; minimum concentration of an analyte that can be determined with 99% confidence that the concentration is greater than zero.
MS	Matrix Spike
MSD	Matrix Spike Duplicate
Prec	Precision (% RPD)
Q	Qualifier; comment used to note deviations or additional information associated with analytical results.
QC	Quality Control
Rec	Recovery of Matrix Spike
RL	Reporting Limit; lowest concentration at which an analyte can be quantitatively measured.
Vio Spec	Violation Specification; regulatory limit which has been exceeded by the sample analyzed.

Qualifier	Description
FA	Field results were reviewed by the Water Field Group. Refer to APC Field Case Narrative.
J	Reported value is an estimate because concentration is less than reporting limit.
RA	Matrix spike is invalid due to sample concentration.
U	Compound was analyzed, but not detected.

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
	1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
	2	Dissolved Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-2	10/05/2021	11:00	6	Groundwater		BB18668
MW-6	10/05/2021	12:10	6	Groundwater		BB18669
MW-3	10/05/2021	13:25	6	Groundwater		BB18670
MW-4	10/05/2021	14:35	6	Groundwater		BB18671
MW-4 Dup	10/05/2021	14:35	6	Sample Duplicate		BB18672
FB-1	10/05/2021	15:30	4	Field Blank		BB18673
MW-17	10/06/2021	08:45	6	Groundwater		BB18674
MW-16	10/06/2021	10:10	6	Groundwater		BB18675

Relinquished By	Received By	Date/Time
		10/06/2021 14:14

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.0 degrees C
Sample Event	1341	Thermometer ID	5408-27568-2-2
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

8.0

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
	2	Dissolved Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
EB-2	10/05/2021	10:20	4	Equipment Blank		BB18737
PZ-1	10/05/2021	11:00	6	Groundwater		BB18738
MW-5	10/05/2021	11:53	6	Groundwater		BB18739
MW-5 dup	10/05/2021	11:53	6	Sample Duplicate		BB18740
MW-12	10/05/2021	12:58	6	Groundwater		BB18741
MW-1	10/05/2021	14:18	6	Groundwater		BB18742
MW-7	10/05/2021	15:11	6	Groundwater		BB18743
MW-2VA	10/06/2021	10:25	6	Groundwater		BB18744
MW-21VC	10/06/2021	12:46	6	Groundwater		BB18745
FB-2	10/06/2021	13:15	4	Field Blank		BB18746

Relinquished By	Received By	Date/Time
		10/07/2021 08:24

SmarTroll ID	7586-41444-5-3	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.9 degrees C
Sample Event	1341	Thermometer ID	5408-27568-2-2
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
2	Dissolved Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments: Samples relinquished to secure location. GSC Building 8 shipping lab on 10/13/21 @ 07:31.
Correcting bottle count for MW-19H & FB-3. LBM 10/13/21

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-22VB	10/11/2021	11:37	6	Groundwater		BB18995
MW-19H	10/11/2021	12:57	6	Groundwater		BB18996
MW-2	10/11/2021	14:49	6	Groundwater		BB18997
FB-3	10/11/2021	15:15	4	Field Blank		BB18998
MW-2VB	10/12/2021	09:28	6	Groundwater		BB18999
MW-18H	10/12/2021	11:17	6	Groundwater		BB19000
PZ-5	10/12/2021	12:16	6	Groundwater		BB19001
PZ-6	10/12/2021	13:40	6	Groundwater		BB19002

Relinquished By	Received By	Date/Time
	Laura Midkiff Digitally signed by Laura Midkiff Date: 2021.10.13 08:52:41 -05'00'	10/13/2021 08:52

SmarTroll ID	7586-41444-5-3	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.1 degrees C
Sample Event	1341	Thermometer ID	5408-27568-2-2
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☐ Outside Lab
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
	1	Metals	500 mL	3	Hg	250 mL	5	Anions	250 mL	7	N/A	N/A
	2	Dissolved Metals	500 mL	4	TDS	500 mL	6	Alkalinity	250 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4V	10/11/2021	12:40	6	Groundwater		BB19003
MW-20H	10/11/2021	13:30	6	Groundwater		BB19004
MW-10	10/11/2021	14:40	6	Groundwater		BB19005
MW-14	10/12/2021	08:30	6	Groundwater		BB19006
MW-14 Dup	10/12/2021	08:30	6	Sample Duplicate		BB19007
MW-8	10/12/2021	10:48	6	Groundwater		BB19008
MW-9	10/12/2021	11:55	6	Groundwater		BB19009
MW-11	10/12/2021	12:55	6	Groundwater		BB19010
EB-1	10/12/2021	13:30	4	Equipment Blank		BB19011

Relinquished By	Received By	Date/Time
		10/13/2021 08:40

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.0 degrees C
Sample Event	1341	Thermometer ID	5408-27568-2-2
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: MS/MSD collected at MW-6

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
PZ-2	10/05/2021	11:00	1	Groundwater		BB18676
MW-6	10/05/2021	12:10	3	Groundwater		BB18677
MW-3	10/05/2021	13:25	1	Groundwater		BB18678
MW-4	10/05/2021	14:35	1	Groundwater		BB18679
MW-4 Dup	10/05/2021	14:35	1	Sample Duplicate		BB18680
FB-1	10/05/2021	15:30	1	Field Blank		BB18681
MW-17	10/06/2021	08:45	1	Groundwater		BB18682
MW-16	10/06/2021	10:10	1	Groundwater		BB18683

Relinquished By	Received By	Date/Time
		10/06/2021 14:14

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	N/A
Sample Event	1341	Thermometer ID	N/A
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at PZ-1

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
EB-2	10/05/2021	10:20	1	Equipment Blank		BB18747
PZ-1	10/05/2021	11:00	3	Groundwater		BB18748
MW-5	10/05/2021	11:53	1	Groundwater		BB18749
MW-5 dup	10/05/2021	11:53	1	Sample Duplicate		BB18750
MW-12	10/05/2021	12:58	1	Groundwater		BB18751
MW-1	10/05/2021	14:18	1	Groundwater		BB18752
MW-7	10/05/2021	15:11	1	Groundwater		BB18753
MW-2VA	10/06/2021	10:25	1	Groundwater		BB18754
MW-21VC	10/06/2021	12:46	1	Groundwater		BB18755
FB-2	10/06/2021	13:15	1	Field Blank		BB18756

Relinquished By	Received By	Date/Time
		10/07/2021 08:24

SmarTroll ID	7586-41444-5-3	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1341	Thermometer ID	N/A
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	Dallas Gentry	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles													
	1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
	2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments: Radium MS/MSD collected at MW-22VB. Samples relinquished to secure location, GSC Building 8 shipping lab on 10/13/21 @ 07:30.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-22VB	10/11/2021	11:37	3	Groundwater		BB19012
MW-19H	10/11/2021	12:57	1	Groundwater		BB19013
MW-2	10/11/2021	14:49	1	Groundwater		BB19014
FB-3	10/11/2021	15:15	1	Field Blank		BB19015
MW-2VB	10/12/2021	09:28	1	Groundwater		BB19016
MW-18H	10/12/2021	11:17	1	Groundwater		BB19017
PZ-5	10/12/2021	12:16	1	Groundwater		BB19018
PZ-6	10/12/2021	13:40	1	Groundwater		BB19019

Relinquished By	Received By	Date/Time
	Laura Midkiff Digitally signed by Laura Midkiff Date: 2021.10.13 08:52:57 -05'00'	10/13/2021 08:52

SmarTroll ID	7586-41444-5-3	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	N/A
Sample Event	1341	Thermometer ID	N/A
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Chain of Custody
Groundwater
APC General Testing Laboratory

☑ Field Complete ☑ Lab Complete ☑ Outside Lab

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Collector	TJ Daugherty	Requested By	Greg Dyer
		Location	Gadsden Ash Pond

Bottles												
1	Radium	1 L	3	N/A	N/A	5	N/A	N/A	7	N/A	N/A
2	N/A	N/A	4	N/A	N/A	6	N/A	N/A	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4V	10/11/2021	12:40	1	Groundwater		BB19020
MW-20H	10/11/2021	13:30	1	Groundwater		BB19021
MW-10	10/11/2021	14:40	1	Groundwater		BB19022
MW-14	10/12/2021	08:30	1	Groundwater		BB19023
MW-14 Dup	10/12/2021	08:30	1	Sample Duplicate		BB19024
MW-8	10/12/2021	10:48	1	Groundwater		BB19025
MW-9	10/12/2021	11:55	1	Groundwater		BB19026
MW-11	10/12/2021	12:55	1	Groundwater		BB19027
EB-1	10/12/2021	13:30	1	Equipment Blank		BB19028

Relinquished By	Received By	Date/Time
		10/13/2021 08:40

SmarTroll ID	7586-41443-5-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	N/A
Sample Event	1341	Thermometer ID	N/A
		pH Strip ID	8440-53679-10-5

Bottles/Pre-Preserved Bottles are provided by the GTL

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

December 13, 2021

Laura Midkiff
Alabama Power
744 Highway 87
GSC #8
Calera, AL 35040

RE: Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Brooke Caton, Alabama Power
Renee Jernigan, Alabama Power

Pace Analytical Services, LLC
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Huntersville, NC 28078
(704)875-9092

CERTIFICATIONS

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92567366001	BB18676 PZ-2	Water	10/05/21 11:00	10/19/21 00:00
92567366002	BB18677 MW-6	Water	10/05/21 12:10	10/19/21 00:00
92567366003	BB18677 MW-6 MS	Water	10/05/21 12:10	10/19/21 00:00
92567366004	BB18677 MW-6 MSD	Water	10/05/21 12:10	10/19/21 00:00
92567366005	BB18678 MW-3	Water	10/05/21 13:25	10/19/21 00:00
92567366006	BB18679 MW-4	Water	10/05/21 14:35	10/19/21 00:00
92567366007	BB18680 MW-4 DUP	Water	10/05/21 14:35	10/19/21 00:00
92567366008	BB18681 FB-1	Water	10/05/21 15:30	10/19/21 00:00
92567366009	BB18682 MW-17	Water	10/06/21 08:45	10/19/21 00:00
92567366010	BB18683 MW-16	Water	10/06/21 10:10	10/19/21 00:00
92567366011	BB18747 EB-2	Water	10/05/21 10:20	10/19/21 00:00
92567366012	BB18748 PZ-1	Water	10/05/21 11:00	10/19/21 00:00
92567366013	BB18748 PZ-1 MS	Water	10/05/21 11:00	10/19/21 00:00
92567366014	BB18748 PZ-1 MSD	Water	10/05/21 11:00	10/19/21 00:00
92567366015	BB18749 MW-5	Water	10/05/21 11:53	10/19/21 00:00
92567366016	BB18750 MW-5 DUP	Water	10/05/21 11:53	10/19/21 00:00
92567366017	BB18751 MW-12	Water	10/05/21 12:58	10/19/21 00:00
92567366018	BB18752 MW-1	Water	10/05/21 14:18	10/19/21 00:00
92567366019	BB18753 MW-7	Water	10/05/21 15:11	10/19/21 00:00
92567366020	BB18754 MW-2VA	Water	10/06/21 10:25	10/19/21 00:00
92567366021	BB18755 MW-21VC	Water	10/06/21 12:46	10/19/21 00:00
92567366022	BB18756 FB-2	Water	10/06/21 13:15	10/19/21 00:00
92567366023	BB19012 MW-22VB	Water	10/11/21 11:37	10/19/21 00:00
92567366024	BB19012 MW-22VB MS	Water	10/11/21 11:37	10/19/21 00:00
92567366025	BB19012 MW-22VB MSD	Water	10/11/21 11:37	10/19/21 00:00
92567366026	BB19013 MW-19H	Water	10/11/21 12:57	10/19/21 00:00
92567366027	BB19014 MW-2	Water	10/11/21 14:49	10/19/21 00:00
92567366028	BB19015 FB-3	Water	10/11/21 15:15	10/19/21 00:00
92567366029	BB19016 MW-2VB	Water	10/12/21 09:28	10/19/21 00:00
92567366030	BB19017 MW-18H	Water	10/12/21 11:17	10/19/21 00:00
92567366031	BB19018 PZ-5	Water	10/12/21 12:16	10/19/21 00:00
92567366032	BB19019 PZ-6	Water	10/12/21 13:40	10/19/21 00:00
92567366033	BB19020 MW-4V	Water	10/11/21 12:40	10/19/21 00:00
92567366034	BB19021 MW-20H	Water	10/11/21 13:30	10/19/21 00:00
92567366035	BB19022 MW-10	Water	10/11/21 14:40	10/19/21 00:00
92567366036	BB19023 MW-14	Water	10/12/21 08:30	10/19/21 00:00
92567366037	BB19024 MW-14 DUP	Water	10/12/21 08:30	10/19/21 00:00

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE SUMMARY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92567366038	**BB19025 MW-8**	Water	10/12/21 10:48	10/19/21 00:00
92567366039	**BB19026 MW-9**	Water	10/12/21 11:55	10/19/21 00:00
92567366040	**BB19027 MW-11**	Water	10/12/21 12:55	10/19/21 00:00
92567366041	**BB19028 EB-1**	Water	10/12/21 13:30	10/19/21 00:00

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92567366001	**BB18676 PZ-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366002	**BB18677 MW-6**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366003	**BB18677 MW-6 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366004	**BB18677 MW-6 MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366005	**BB18678 MW-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366006	**BB18679 MW-4**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366007	**BB18680 MW-4 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366008	**BB18681 FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366009	**BB18682 MW-17**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366010	**BB18683 MW-16**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366011	**BB18747 EB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366012	**BB18748 PZ-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366013	**BB18748 PZ-1 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92567366014	**BB18748 PZ-1 MSD**	EPA 9315	LAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
92567366015	**BB18749 MW-5**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366016	**BB18750 MW-5 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366017	**BB18751 MW-12**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366018	**BB18752 MW-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366019	**BB18753 MW-7**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366020	**BB18754 MW-2VA**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366021	**BB18755 MW-21VC**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366022	**BB18756 FB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366023	**BB19012 MW-22VB**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366024	**BB19012 MW-22VB MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366025	**BB19012 MW-22VB MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366026	**BB19013 MW-19H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366027	**BB19014 MW-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
92567366028	BB19015 FB-3	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366029	BB19016 MW-2VB	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366030	BB19017 MW-18H	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366031	BB19018 PZ-5	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366032	BB19019 PZ-6	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366033	BB19020 MW-4V	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366034	BB19021 MW-20H	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366035	BB19022 MW-10	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366036	BB19023 MW-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366037	BB19024 MW-14 DUP	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366038	BB19025 MW-8	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366039	BB19026 MW-9	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92567366040	**BB19027 MW-11**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366041	**BB19028 EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: December 13, 2021

General Information:
41 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: December 13, 2021

General Information:
41 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: December 13, 2021

General Information:
35 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18676 PZ-2 **Lab ID: 92567366001** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.184U ± 0.173 (0.315) C:93% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.941 ± 0.426 (0.713) C:82% T:83%**	pCi/L	11/08/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.13 ± 0.599 (1.03)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18677 MW-6 **Lab ID: 92567366002** Collected: 10/05/21 12:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.107U ± 0.155 (0.335) C:93% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.25 ± 0.527 (0.863) C:78% T:81%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.36 ± 0.682 (1.20)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18677 MW-6 MS **Lab ID: 92567366003** Collected: 10/05/21 12:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**98.32 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**130.33 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/08/21 14:35	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18677 MW-6 MSD **Lab ID: 92567366004** Collected: 10/05/21 12:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**106.30 %REC 7.80 RPD ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**145.98 %REC 11.33 RPD ± NA (NA) C:NA T:NA**	pCi/L	11/08/21 14:35	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18678 MW-3 **Lab ID: 92567366005** Collected: 10/05/21 13:25 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.231U ± 0.176 (0.310) C:97% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.98 ± 0.812 (0.891) C:74% T:80%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.21 ± 0.988 (1.20)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18679 MW-4 **Lab ID: 92567366006** Collected: 10/05/21 14:35 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.804 ± 0.308 (0.341) C:97% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.950 ± 0.474 (0.839) C:74% T:88%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.75 ± 0.782 (1.18)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18680 MW-4 DUP **Lab ID: 92567366007** Collected: 10/05/21 14:35 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.366 ± 0.205 (0.300) C:99% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.943 ± 0.429 (0.705) C:72% T:93%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.31 ± 0.634 (1.01)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18681 FB-1 **Lab ID: 92567366008** Collected: 10/05/21 15:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0744U ± 0.0619 (0.273) C:99% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.16 ± 0.489 (0.798) C:75% T:91%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16 ± 0.551 (1.07)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18682 MW-17 **Lab ID: 92567366009** Collected: 10/06/21 08:45 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.319U ± 0.217 (0.394) C:99% T:NA**	pCi/L	12/03/21 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.69 ± 0.600 (0.871) C:71% T:83%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.01 ± 0.817 (1.27)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18683 MW-16 **Lab ID: 92567366010** Collected: 10/06/21 10:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.193U ± 0.270 (0.597) C:91% T:NA**	pCi/L	12/03/21 08:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.962 ± 0.486 (0.852) C:73% T:82%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16U ± 0.756 (1.45)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18747 EB-2 **Lab ID: 92567366011** Collected: 10/05/21 10:20 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.145U ± 0.196 (0.564) C:91% T:NA**	pCi/L	12/03/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.87 ± 0.757 (0.795) C:78% T:88%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.87 ± 0.953 (1.36)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18748 PZ-1 **Lab ID: 92567366012** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0760U ± 0.174 (0.406) C:92% T:NA**	pCi/L	12/03/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.99 ± 0.628 (0.844) C:71% T:86%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.07 ± 0.802 (1.25)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18748 PZ-1 MS **Lab ID: 92567366013** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**105.98 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**63.31 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/15/21 11:01	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18748 PZ-1 MSD **Lab ID: 92567366014** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**94.82 %REC 11.11 RPD ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**70.69 %REC 11.03 RPD ± NA (NA) C:NA T:NA**	pCi/L	11/15/21 11:01	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18749 MW-5 **Lab ID: 92567366015** Collected: 10/05/21 11:53 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.332U ± 0.225 (0.408) C:95% T:NA**	pCi/L	12/03/21 14:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.11 ± 0.465 (0.750) C:73% T:94%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.44 ± 0.690 (1.16)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18750 MW-5 DUP **Lab ID: 92567366016** Collected: 10/05/21 11:53 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.231U ± 0.182 (0.329) C:95% T:NA**	pCi/L	12/03/21 14:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.28 ± 0.510 (0.787) C:75% T:83%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.51 ± 0.692 (1.12)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18751 MW-12 **Lab ID: 92567366017** Collected: 10/05/21 12:58 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.214U ± 0.194 (0.383) C:95% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.27 ± 0.493 (0.760) C:77% T:88%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.48 ± 0.687 (1.14)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18752 MW-1 **Lab ID: 92567366018** Collected: 10/05/21 14:18 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.812 ± 0.281 (0.218) C:95% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.395U ± 0.408 (0.845) C:75% T:83%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21 ± 0.689 (1.06)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18753 MW-7 **Lab ID: 92567366019** Collected: 10/05/21 15:11 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.402 ± 0.215 (0.318) C:96% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.869 ± 0.441 (0.783) C:80% T:89%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27 ± 0.656 (1.10)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18754 MW-2VA **Lab ID: 92567366020** Collected: 10/06/21 10:25 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.458 ± 0.242 (0.356) C:89% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.288U ± 0.313 (0.651) C:85% T:89%**	pCi/L	11/08/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.746U ± 0.555 (1.01)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18755 MW-21VC **Lab ID: 92567366021** Collected: 10/06/21 12:46 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.243U ± 0.261 (0.554) C:96% T:NA**	pCi/L	12/03/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.54 ± 0.558 (0.847) C:74% T:88%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.78 ± 0.819 (1.40)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB18756 FB-2 **Lab ID: 92567366022** Collected: 10/06/21 13:15 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.246U ± 0.221 (0.433) C:97% T:NA**	pCi/L	12/03/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.412U ± 0.393 (0.806) C:71% T:85%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.658U ± 0.614 (1.24)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19012 MW-22VB **Lab ID: 92567366023** Collected: 10/11/21 11:37 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.18 ± 0.378 (0.361) C:80% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.113U ± 0.360 (0.812) C:70% T:85%**	pCi/L	11/17/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29 ± 0.738 (1.17)**	pCi/L	12/03/21 17:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19012 MW-22VB MS **Lab ID: 92567366024** Collected: 10/11/21 11:37 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**87.64 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**88.82 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/17/21 11:24	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19012 MW-22VB MSD **Lab ID: 92567366025** Collected: 10/11/21 11:37 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**95.89 %REC 9.00 RPD ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**91.27 %REC 2.72 RPD ± NA (NA) C:NA T:NA**	pCi/L	11/17/21 11:24	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19013 MW-19H **Lab ID: 92567366026** Collected: 10/11/21 12:57 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.202U ± 0.185 (0.364) C:96% T:NA**	pCi/L	12/03/21 08:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0132U ± 0.345 (0.813) C:68% T:84%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.202U ± 0.530 (1.18)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19014 MW-2 **Lab ID: 92567366027** Collected: 10/11/21 14:49 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.569 ± 0.264 (0.390) C:101% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.81 ± 0.567 (0.728) C:70% T:89%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.38 ± 0.831 (1.12)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19015 FB-3 **Lab ID: 92567366028** Collected: 10/11/21 15:15 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.109U ± 0.225 (0.520) C:87% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.898 ± 0.440 (0.760) C:69% T:88%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.01U ± 0.665 (1.28)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19016 MW-2VB **Lab ID: 92567366029** Collected: 10/12/21 09:28 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0902U ± 0.202 (0.471) C:97% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.233U ± 0.374 (0.812) C:70% T:82%**	pCi/L	11/15/21 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.323U ± 0.576 (1.28)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19017 MW-18H **Lab ID: 92567366030** Collected: 10/12/21 11:17 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0898U ± 0.136 (0.299) C:91% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.293U ± 0.376 (0.800) C:70% T:84%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.383U ± 0.512 (1.10)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19018 PZ-5 **Lab ID: 92567366031** Collected: 10/12/21 12:16 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.114U ± 0.167 (0.368) C:89% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.849 ± 0.420 (0.741) C:72% T:96%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.963U ± 0.587 (1.11)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19019 PZ-6 **Lab ID: 92567366032** Collected: 10/12/21 13:40 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.823 ± 0.312 (0.397) C:97% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.743U ± 0.445 (0.832) C:71% T:85%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.57 ± 0.757 (1.23)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19020 MW-4V **Lab ID: 92567366033** Collected: 10/11/21 12:40 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.410U ± 0.254 (0.425) C:95% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.17 ± 0.511 (0.850) C:68% T:85%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.58 ± 0.765 (1.28)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19021 MW-20H **Lab ID: 92567366034** Collected: 10/11/21 13:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.506 ± 0.236 (0.289) C:94% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.585U ± 0.455 (0.906) C:70% T:82%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09U ± 0.691 (1.20)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19022 MW-10 **Lab ID: 92567366035** Collected: 10/11/21 14:40 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**6.07 ± 1.13 (0.520) C:94% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.448U ± 0.397 (0.810) C:71% T:93%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**6.52 ± 1.53 (1.33)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19023 MW-14 **Lab ID: 92567366036** Collected: 10/12/21 08:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.14 ± 0.388 (0.450) C:94% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.468U ± 0.365 (0.724) C:74% T:87%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.61 ± 0.753 (1.17)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19024 MW-14 DUP **Lab ID: 92567366037** Collected: 10/12/21 08:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.526 ± 0.280 (0.415) C:94% T:NA**	pCi/L	12/03/21 10:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.08 ± 0.493 (0.837) C:73% T:82%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.61 ± 0.773 (1.25)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19025 MW-8 **Lab ID: 92567366038** Collected: 10/12/21 10:48 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.291U ± 0.209 (0.346) C:95% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0878U ± 0.347 (0.820) C:76% T:85%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.291U ± 0.556 (1.17)**	pCi/L	12/03/21 17:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19026 MW-9 **Lab ID: 92567366039** Collected: 10/12/21 11:55 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.311U ± 0.242 (0.454) C:95% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0569U ± 0.341 (0.797) C:76% T:91%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.311U ± 0.583 (1.25)**	pCi/L	12/03/21 17:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19027 MW-11 **Lab ID: 92567366040** Collected: 10/12/21 12:55 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.641 ± 0.322 (0.528) C:102% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.374U ± 0.383 (0.796) C:70% T:89%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02U ± 0.705 (1.32)**	pCi/L	12/03/21 17:11	7440-14-4	

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Huntersville, NC 28078
(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Sample: BB19028 EB-1 **Lab ID: 92567366041** Collected: 10/12/21 13:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.338U ± 0.217 (0.350) C:85% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0413U ± 0.298 (0.692) C:68% T:85%**	pCi/L	11/17/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.379U ± 0.515 (1.04)**	pCi/L	12/03/21 17:11	7440-14-4	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

QC Batch: 470012 Analysis Method: EPA 9315
QC Batch Method: EPA 9315 Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366038, 92567366039, 92567366040, 92567366041

METHOD BLANK: 2269081 Matrix: Water
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366038, 92567366039, 92567366040, 92567366041

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.522 ± 0.345 (0.615) C:92% T:NA	pCi/L	12/03/21 08:39	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

QC Batch: 470011
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037

METHOD BLANK: 2269079
Matrix: Water
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.276 ± 0.303 (0.633) C:96% T:NA	pCi/L	12/03/21 08:13	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

QC Batch: 470829
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366041

METHOD BLANK: 2272897 Matrix: Water
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366041

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.00736 ± 0.282 (0.665) C:71% T:86%	pCi/L	11/17/21 14:28	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

QC Batch: 470828
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037, 92567366038, 92567366039, 92567366040

METHOD BLANK: 2272896
Matrix: Water
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037, 92567366038, 92567366039, 92567366040

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.309 ± 0.352 (0.742) C:77% T:92%	pCi/L	11/15/21 11:01	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

QC Batch: 470009
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

METHOD BLANK: 2269074
Matrix: Water
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0230 ± 0.117 (0.365) C:97% T:NA	pCi/L	12/03/21 08:48	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

QC Batch: 470827
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

METHOD BLANK: 2272895
Matrix: Water
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.897 ± 0.395 (0.647) C:80% T:87%	pCi/L	11/08/21 11:14	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92567366001	BB18676 PZ-2	EPA 9315	470009		
92567366002	BB18677 MW-6	EPA 9315	470009		
92567366003	BB18677 MW-6 MS	EPA 9315	470009		
92567366004	BB18677 MW-6 MSD	EPA 9315	470009		
92567366005	BB18678 MW-3	EPA 9315	470009		
92567366006	BB18679 MW-4	EPA 9315	470009		
92567366007	BB18680 MW-4 DUP	EPA 9315	470009		
92567366008	BB18681 FB-1	EPA 9315	470009		
92567366009	BB18682 MW-17	EPA 9315	470009		
92567366010	BB18683 MW-16	EPA 9315	470009		
92567366011	BB18747 EB-2	EPA 9315	470009		
92567366012	BB18748 PZ-1	EPA 9315	470011		
92567366013	BB18748 PZ-1 MS	EPA 9315	470011		
92567366014	BB18748 PZ-1 MSD	EPA 9315	470011		
92567366015	BB18749 MW-5	EPA 9315	470009		
92567366016	BB18750 MW-5 DUP	EPA 9315	470009		
92567366017	BB18751 MW-12	EPA 9315	470009		
92567366018	BB18752 MW-1	EPA 9315	470009		
92567366019	BB18753 MW-7	EPA 9315	470009		
92567366020	BB18754 MW-2VA	EPA 9315	470009		
92567366021	BB18755 MW-21VC	EPA 9315	470011		
92567366022	BB18756 FB-2	EPA 9315	470011		
92567366023	BB19012 MW-22VB	EPA 9315	470012		
92567366024	BB19012 MW-22VB MS	EPA 9315	470012		
92567366025	BB19012 MW-22VB MSD	EPA 9315	470012		
92567366026	BB19013 MW-19H	EPA 9315	470011		
92567366027	BB19014 MW-2	EPA 9315	470011		
92567366028	BB19015 FB-3	EPA 9315	470011		
92567366029	BB19016 MW-2VB	EPA 9315	470011		
92567366030	BB19017 MW-18H	EPA 9315	470011		
92567366031	BB19018 PZ-5	EPA 9315	470011		
92567366032	BB19019 PZ-6	EPA 9315	470011		
92567366033	BB19020 MW-4V	EPA 9315	470011		
92567366034	BB19021 MW-20H	EPA 9315	470011		
92567366035	BB19022 MW-10	EPA 9315	470011		
92567366036	BB19023 MW-14	EPA 9315	470011		
92567366037	BB19024 MW-14 DUP	EPA 9315	470011		
92567366038	BB19025 MW-8	EPA 9315	470012		
92567366039	BB19026 MW-9	EPA 9315	470012		
92567366040	BB19027 MW-11	EPA 9315	470012		
92567366041	BB19028 EB-1	EPA 9315	470012		
92567366001	BB18676 PZ-2	EPA 9320	470827		
92567366002	BB18677 MW-6	EPA 9320	470827		
92567366003	BB18677 MW-6 MS	EPA 9320	470827		
92567366004	BB18677 MW-6 MSD	EPA 9320	470827		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92567366005	BB18678 MW-3	EPA 9320	470827		
92567366006	BB18679 MW-4	EPA 9320	470827		
92567366007	BB18680 MW-4 DUP	EPA 9320	470827		
92567366008	BB18681 FB-1	EPA 9320	470827		
92567366009	BB18682 MW-17	EPA 9320	470827		
92567366010	BB18683 MW-16	EPA 9320	470827		
92567366011	BB18747 EB-2	EPA 9320	470827		
92567366012	BB18748 PZ-1	EPA 9320	470828		
92567366013	BB18748 PZ-1 MS	EPA 9320	470828		
92567366014	BB18748 PZ-1 MSD	EPA 9320	470828		
92567366015	BB18749 MW-5	EPA 9320	470827		
92567366016	BB18750 MW-5 DUP	EPA 9320	470827		
92567366017	BB18751 MW-12	EPA 9320	470827		
92567366018	BB18752 MW-1	EPA 9320	470827		
92567366019	BB18753 MW-7	EPA 9320	470827		
92567366020	BB18754 MW-2VA	EPA 9320	470827		
92567366021	BB18755 MW-21VC	EPA 9320	470828		
92567366022	BB18756 FB-2	EPA 9320	470828		
92567366023	BB19012 MW-22VB	EPA 9320	470829		
92567366024	BB19012 MW-22VB MS	EPA 9320	470829		
92567366025	BB19012 MW-22VB MSD	EPA 9320	470829		
92567366026	BB19013 MW-19H	EPA 9320	470828		
92567366027	BB19014 MW-2	EPA 9320	470828		
92567366028	BB19015 FB-3	EPA 9320	470828		
92567366029	BB19016 MW-2VB	EPA 9320	470828		
92567366030	BB19017 MW-18H	EPA 9320	470828		
92567366031	BB19018 PZ-5	EPA 9320	470828		
92567366032	BB19019 PZ-6	EPA 9320	470828		
92567366033	BB19020 MW-4V	EPA 9320	470828		
92567366034	BB19021 MW-20H	EPA 9320	470828		
92567366035	BB19022 MW-10	EPA 9320	470828		
92567366036	BB19023 MW-14	EPA 9320	470828		
92567366037	BB19024 MW-14 DUP	EPA 9320	470828		
92567366038	BB19025 MW-8	EPA 9320	470828		
92567366039	BB19026 MW-9	EPA 9320	470828		
92567366040	BB19027 MW-11	EPA 9320	470828		
92567366041	BB19028 EB-1	EPA 9320	470829		
92567366001	BB18676 PZ-2	Total Radium Calculation	474984		
92567366002	BB18677 MW-6	Total Radium Calculation	474984		
92567366005	BB18678 MW-3	Total Radium Calculation	474984		
92567366006	BB18679 MW-4	Total Radium Calculation	474984		
92567366007	BB18680 MW-4 DUP	Total Radium Calculation	474984		
92567366008	BB18681 FB-1	Total Radium Calculation	474984		
92567366009	BB18682 MW-17	Total Radium Calculation	474984		
92567366010	BB18683 MW-16	Total Radium Calculation	474984		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GADSEDN ASH POND WMWGADAP_1341
Pace Project No.: 92567366

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92567366011	**BB18747 EB-2**	Total Radium Calculation	474984		
92567366012	**BB18748 PZ-1**	Total Radium Calculation	474985		
92567366015	**BB18749 MW-5**	Total Radium Calculation	474984		
92567366016	**BB18750 MW-5 DUP**	Total Radium Calculation	474984		
92567366017	**BB18751 MW-12**	Total Radium Calculation	474984		
92567366018	**BB18752 MW-1**	Total Radium Calculation	474984		
92567366019	**BB18753 MW-7**	Total Radium Calculation	474984		
92567366020	**BB18754 MW-2VA**	Total Radium Calculation	474984		
92567366021	**BB18755 MW-21VC**	Total Radium Calculation	474985		
92567366022	**BB18756 FB-2**	Total Radium Calculation	474985		
92567366023	**BB19012 MW-22VB**	Total Radium Calculation	474986		
92567366026	**BB19013 MW-19H**	Total Radium Calculation	474985		
92567366027	**BB19014 MW-2**	Total Radium Calculation	474985		
92567366028	**BB19015 FB-3**	Total Radium Calculation	474985		
92567366029	**BB19016 MW-2VB**	Total Radium Calculation	474985		
92567366030	**BB19017 MW-18H**	Total Radium Calculation	474985		
92567366031	**BB19018 PZ-5**	Total Radium Calculation	474985		
92567366032	**BB19019 PZ-6**	Total Radium Calculation	474985		
92567366033	**BB19020 MW-4V**	Total Radium Calculation	474985		
92567366034	**BB19021 MW-20H**	Total Radium Calculation	474985		
92567366035	**BB19022 MW-10**	Total Radium Calculation	474985		
92567366036	**BB19023 MW-14**	Total Radium Calculation	474985		
92567366037	**BB19024 MW-14 DUP**	Total Radium Calculation	474985		
92567366038	**BB19025 MW-8**	Total Radium Calculation	474986		
92567366039	**BB19026 MW-9**	Total Radium Calculation	474986		
92567366040	**BB19027 MW-11**	Total Radium Calculation	474986		
92567366041	**BB19028 EB-1**	Total Radium Calculation	474986		

WO# : 92567366

92567366

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace NC Proj

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other _____

Label ☑

Tracking #: 532016279 3894

LIMS Login ☑

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☐ yes ☐ no

Thermometer Used --- Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp — °C Correction Factor: — °C Final Temp: — °C

Temp should be above freezing to 6°C

WO# : 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

Comments:	Yes	No	N/A	pH paper Lot# 10204111 / Date and Initials of person examining contents: AE 10/20/21
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:		X		3.
Sampler Name & Signature on COC:		X		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used: -Pace Containers Used:	X			10.
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	X			16.
All containers meet method preservation requirements.	X			Initial when completed: AE Date/time of preservation: Lot # of added preservative:
Headspace in VOA Vials (>6mm):			X	17.
Trip Blank Present:			X	18.
Trip Blank Custody Seals Present			X	
Rad Samples Screened < 0.5 mrem/hr	X			Initial when completed: AE Date: 10/20/21 Survey Meter SN: 1503

Client Notification/ Resolution:

Person Contacted: _____ Date/Time: _____ Contacted By: _____

Comments/ Resolution: _____

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 4

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gadsden Ash Pond
Project Number:	WMWGADAP_1341

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency:

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Du	Residual Chlorine (Y/N)
1	BB18676	PZ-2	GW	G	10/5/2021	11:00				1			X							X	X	X		
2	BB18677	MW-6	GW	G	10/5/2021	12:10				3			X							X	X	X	X	
3	BB18678	MW-3	GW	G	10/5/2021	13:25				1			X							X	X	X		
4	BB18679	MW-4	GW	G	10/5/2021	14:35				1			X							X	X	X		
5	BB18680	MW-4 DUP	GW	G	10/5/2021	14:35				1			X							X	X	X		
6	BB18681	FB-1	GW	G	10/5/2021	15:30				1			X							X	X	X		
7	BB18682	MW-17	GW	G	10/6/2021	8:45				1			X							X	X	X		
8	BB18683	MW-16	GW	G	10/6/2021	10:10				1			X							X	X	X		
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/19/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO# : 30446362

PM: RES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 2 Of 4

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC10700668	Pace Quote:	CCR
Phone:	205-664-6197 Fax	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Kevin.Herring@pacelabs.com
Requested Due Date:	28 days	Project Number:	WMWGADAP 1341	Pace Profile #:	13805

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Dup	Residual Chlorine (Y/N)
1	BB18747	EB-2	GW	G	10/5/2021	10:20				1			X							X	X	X		
2	BB18748	PZ-1	GW	G	10/5/2021	11:00				3			X							X	X	X	X	
3	BB18749	MW-5	GW	G	10/5/2021	11:53				1			X							X	X	X		
4	BB18750	MW-5 DUP	GW	G	10/5/2021	11:53				1			X							X	X	X		
5	BB18751	MW-12	GW	G	10/5/2021	12:58				1			X							X	X	X		
6	BB18752	MW-1	GW	G	10/5/2021	14:18				1			X							X	X	X		
7	BB18753	MW-7	GW	G	10/5/2021	15:11				1			X							X	X	X		
8	BB18754	MW-2VA	GW	G	10/6/2021	10:25				1			X							X	X	X		
9	BB18755	MW-21VC	GW	G	10/6/2021	12:46				1			X							X	X	X		
10	BB18756	FB-2	GW	G	10/6/2021	13:15				1			X							X	X	X		
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/14/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

WO#: 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 3 Of 4

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gadsden Ash Pond
Project Number:	WMWGADAP_1341

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency: —

State / Location: AL

Requested Analysis Filtered (Y/N)

SAMPLE ID — One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique

MATRIX codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ITEM #	SAMPLE ID		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB19012	MW-22VB	GW	G	10/11/2021	11:37				3			X							X	X	X	X	
2	BB19013	MW-19H	GW	G	10/11/2021	12:57				1			X							X	X	X		
3	BB19014	MW-2	GW	G	10/11/2021	14:49				1			X							X	X	X		
4	BB19015	FB-3	GW	G	10/11/2021	15:15				1			X							X	X	X		
5	BB19016	MW-2VB	GW	G	10/12/2021	9:28				1			X							X	X	X		
6	BB19017	MW-18H	GW	G	10/12/2021	11:17				1			X							X	X	X		
7	BB19018	PZ-5	GW	G	10/12/2021	12:16				1			X							X	X	X		
8	BB19019	PZ-6	GW	G	10/12/2021	13:40				1			X							X	X	X		
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/14/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 4 Of 4

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8
	Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gadsden Ash Pond
Project Number:	WMWGADAP_1341

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency

State / Location

AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB19020	MW-4V	GW	G	10/11/2021	12:40				1			X							X	X	X		
2	BB19021	MW-20H	GW	G	10/11/2021	13:30				1			X							X	X	X		
3	BB19022	MW-10	GW	G	10/11/2021	14:40				1			X							X	X	X		
4	BB19023	MW-14	GW	G	10/12/2021	8:30				1			X							X	X	X		
5	BB19024	MW-14 DUP	GW	G	10/12/2021	8:30				1			X							X	X	X		
6	BB19025	MW-8	GW	G	10/12/2021	10:48				1			X							X	X	X		
7	BB19026	MW-9	GW	G	10/12/2021	11:55				1			X							X	X	X		
8	BB19027	MW-11	GW	G	10/12/2021	12:55				1			X							X	X	X		
9	BB19028	EB-1	GW	G	10/12/2021	13:30				1			X							X	X	X		
10																								
11																								
12																								

Matrix codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/19/21	0935	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: JC2
Date: 11/4/2021
Worklist: 63440
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2272895
MB concentration:	0.897
M/B 2 Sigma CSU:	0.395
MB MDC:	0.647
MB Numerical Performance Indicator:	4.45
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63440	LCSD63440
Count Date:	11/8/2021	
Spike I.D.:	21-029	
Decay Corrected Spike Concentration (pCi/mL):	37.538	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.817	
Target Conc. (pCi/L, g, F):	4.597	
Uncertainty (Calculated):	0.225	
Result (pCi/L, g, F):	4.495	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.001	
Numerical Performance Indicator:	-0.19	
Percent Recovery:	97.78%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366002	
Sample MS I.D.	92567366003	
Sample MSD I.D.	92567366004	
Spike I.D.:	21-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	37.961	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.803	
MS Target Conc.(pCi/L, g, F):	9.460	
MSD Aliquot (L, g, F):	0.812	
MSD Target Conc. (pCi/L, g, F):	9.345	
MS Spike Uncertainty (calculated):	0.464	
MSD Spike Uncertainty (calculated):	0.458	
Sample Result:	1.252	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.527	
Sample Matrix Spike Result:	13.581	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.628	
Sample Matrix Spike Duplicate Result:	14.894	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.862	
MS Numerical Performance Indicator:	2.068	
MSD Numerical Performance Indicator:	2.859	
MS Percent Recovery:	130.33%	
MSD Percent Recovery:	145.98%	
MS Status vs Numerical Indicator:	Warning	
MSD Status vs Numerical Indicator:	Warning	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	MSD High****	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92567366002
Sample MS I.D.	92567366003
Sample MSD I.D.	92567366004
Sample Matrix Spike Result:	13.581
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.628
Sample Matrix Spike Duplicate Result:	14.894
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.862
Duplicate Numerical Performance Indicator:	-0.662
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.33%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable. ✓

Passes NI criteria < 3 for NON-DW

11/10/21

11/10/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	VAL
Date:	11/8/2021
Worklist:	63441
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2272896
MB concentration:	0.309
M/B 2 Sigma CSU:	0.352
MB MDC:	0.742
MB Numerical Performance Indicator:	1.72
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63441	LCSD63441
Count Date:	11/15/2021	
Spike I.D.:	21-029	
Decay Corrected Spike Concentration (pCi/mL):	37.451	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	4.566	
Uncertainty (Calculated):	0.224	
Result (pCi/L, g, F):	4.701	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.062	
Numerical Performance Indicator:	0.24	
Percent Recovery:	102.96%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366012	
Sample MS I.D.	92567366013	
Sample MSD I.D.	92567366014	
Spike I.D.:	21-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	37.961	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.809	
MS Target Conc.(pCi/L, g, F):	9.390	
MSD Aliquot (L, g, F):	0.809	
MSD Target Conc. (pCi/L, g, F):	9.384	
MS Spike Uncertainty (calculated):	0.460	
MSD Spike Uncertainty (calculated):	0.460	
Sample Result:	1.992	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.628	
Sample Matrix Spike Result:	7.936	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.635	
Sample Matrix Spike Duplicate Result:	8.626	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.744	
MS Numerical Performance Indicator:	-3.730	
MSD Numerical Performance Indicator:	-2.822	
MS Percent Recovery:	63.31%	
MSD Percent Recovery:	70.69%	
MS Status vs Numerical Indicator:	Fail****	
MSD Status vs Numerical Indicator:	Warning	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92567366012
Sample MS I.D.	92567366013
Sample MSD I.D.	92567366014
Sample Matrix Spike Result:	7.936
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.635
Sample Matrix Spike Duplicate Result:	8.626
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.744
Duplicate Numerical Performance Indicator:	-0.566
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.03%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

11/22/21

MS passes % Recovery criteria

11/22/21

~~****If all other QC criteria pass, this batch is acceptable. The matrix spike duplicate result indicates a possible bias for this sample only and may not be applicable to any other samples in this analytical batch.~~

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: JC2
Date: 11/8/2021
Worklist: 63442
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2272897
MB concentration:	-0.007
M/B 2 Sigma CSU:	0.282
MB MDC:	0.665
MB Numerical Performance Indicator:	-0.05
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63442	LCSD63442
Count Date:	11/17/2021	
Spike I.D.:	21-029	
Decay Corrected Spike Concentration (pCi/mL):	37.425	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.819	
Target Conc. (pCi/L, g, F):	4.571	
Uncertainty (Calculated):	0.224	
Result (pCi/L, g, F):	5.057	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.123	
Numerical Performance Indicator:	0.83	
Percent Recovery:	110.62%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/11/2021	10/18/2021
Sample I.D.	92567366023	92569905001
Sample MS I.D.	92567366024	92569905002
Sample MSD I.D.	92567366025	92569905003
Spike I.D.:	21-029	21-029
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	37.886	37.886
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.804	0.818
MS Target Conc.(pCi/L, g, F):	9.426	9.265
MSD Aliquot (L, g, F):	0.801	0.814
MSD Target Conc. (pCi/L, g, F):	9.465	9.305
MS Spike Uncertainty (calculated):	0.462	0.454
MSD Spike Uncertainty (calculated):	0.464	0.456
Sample Result:	0.113	0.982
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.360	0.443
Sample Matrix Spike Result:	8.485	10.705
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.737	2.130
Sample Matrix Spike Duplicate Result:	8.752	8.905
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.778	1.832
MS Numerical Performance Indicator:	-1.127	0.404
MSD Numerical Performance Indicator:	-0.865	-1.397
MS Percent Recovery:	88.82%	104.94%
MSD Percent Recovery:	91.27%	85.15%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92567366023	92569905001
Sample MS I.D.	92567366024	92569905002
Sample MSD I.D.	92567366025	92569905003
Sample Matrix Spike Result:	8.485	10.705
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.737	2.130
Sample Matrix Spike Duplicate Result:	8.752	8.905
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.778	1.832
Duplicate Numerical Performance Indicator:	-0.210	1.256
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	2.72%	20.83%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

11/12/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	11/13/2021
Worklist:	63366
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2269079
MB concentration:	0.276
M/B Counting Uncertainty:	0.300
MB MDC:	0.633
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS63366	LCSD63366
Count Date:	12/3/2021	12/3/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.032	24.032
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.202	0.207
Target Conc. (pCi/L, g, F):	11.923	11.615
Uncertainty (Calculated):	0.143	0.139
Result (pCi/L, g, F):	14.114	12.397
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.284	1.174
Numerical Performance Indicator:	3.32	1.30
Percent Recovery:	118.37%	106.73%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366012	
Sample MS I.D.	92567366013	
Sample MSD I.D.	92567366014	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.033	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.306	
MS Target Conc.(pCi/L, g, F):	15.694	
MSD Aliquot (L, g, F):	0.292	
MSD Target Conc. (pCi/L, g, F):	16.471	
MS Spike Uncertainty (calculated):	0.188	
MSD Spike Uncertainty (calculated):	0.198	
Sample Result:	0.076	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.173	
Sample Matrix Spike Result:	16.708	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.130	
Sample Matrix Spike Duplicate Result:	15.694	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.110	
MS Numerical Performance Indicator:	1.587	
MSD Numerical Performance Indicator:	-1.465	
MS Percent Recovery:	105.98%	
MSD Percent Recovery:	94.82%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS63366	
Duplicate Sample I.D.	LCSD63366	
Sample Result (pCi/L, g, F):	14.114	
Sample Result Counting Uncertainty (pCi/L, g, F):	1.284	
Sample Duplicate Result (pCi/L, g, F):	12.397	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.174	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.935	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.34%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92567366012	
Sample MS I.D.	92567366013	
Sample MSD I.D.	92567366014	
Sample Matrix Spike Result:	16.708	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.130	
Sample Matrix Spike Duplicate Result:	15.694	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.110	
Duplicate Numerical Performance Indicator:	1.254	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.11%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

12/3/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 11/13/2021
Worklist: 63365
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2269074
MB concentration:	-0.023
M/B Counting Uncertainty:	0.117
MB MDC:	0.365
MB Numerical Performance Indicator:	-0.39
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS63365	LCSD63365
Count Date:	12/3/2021	12/3/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.032	24.032
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.212	0.205
Target Conc. (pCi/L, g, F):	11.315	11.715
Uncertainty (Calculated):	0.136	0.141
Result (pCi/L, g, F):	11.063	14.724
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.142	1.298
Numerical Performance Indicator:	-0.43	4.52
Percent Recovery:	97.77%	125.69%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Fail High****
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366002	
Sample MS I.D.	92567366003	
Sample MSD I.D.	92567366004	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.033	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.260	
MS Target Conc.(pCi/L, g, F):	18.506	
MSD Aliquot (L, g, F):	0.287	
MSD Target Conc. (pCi/L, g, F):	16.727	
MS Spike Uncertainty (calculated):	0.222	
MSD Spike Uncertainty (calculated):	0.201	
Sample Result:	0.107	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.155	
Sample Matrix Spike Result:	18.302	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237	
Sample Matrix Spike Duplicate Result:	17.888	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.181	
MS Numerical Performance Indicator:	-0.482	
MSD Numerical Performance Indicator:	1.709	
MS Percent Recovery:	98.32%	
MSD Percent Recovery:	106.30%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment	
Sample I.D.:	LCS63365
Duplicate Sample I.D.	LCSD63365
Sample Result (pCi/L, g, F):	11.063
Sample Result Counting Uncertainty (pCi/L, g, F):	1.142
Sample Duplicate Result (pCi/L, g, F):	14.724
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.298
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-4.151
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	24.99%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92567366002
Sample MS I.D.	92567366003
Sample MSD I.D.	92567366004
Sample Matrix Spike Result:	18.302
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237
Sample Matrix Spike Duplicate Result:	17.888
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.181
Duplicate Numerical Performance Indicator:	0.474
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	7.80%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments: LCSD fail high ok, all sample results < RL of 1.0 pCi/L
12/3/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	11/13/2021
Worklist:	63367
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2269081
MB concentration:	0.522
M/B Counting Uncertainty:	0.337
MB MDC:	0.615
MB Numerical Performance Indicator:	3.04
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63367	LCSD63367
Count Date:	12/3/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.032	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.201	
Target Conc. (pCi/L, g, F):	11.954	
Uncertainty (Calculated):	0.143	
Result (pCi/L, g, F):	12.295	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.198	
Numerical Performance Indicator:	0.55	
Percent Recovery:	102.85%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/11/2021	
Sample I.D.	92567366023	
Sample MS I.D.	92567366024	
Sample MSD I.D.	92567366025	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.033	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.273	
MS Target Conc.(pCi/L, g, F):	17.614	
MSD Aliquot (L, g, F):	0.297	
MSD Target Conc. (pCi/L, g, F):	16.202	
MS Spike Uncertainty (calculated):	0.211	
MSD Spike Uncertainty (calculated):	0.194	
Sample Result:	1.179	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.338	
Sample Matrix Spike Result:	16.615	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.188	
Sample Matrix Spike Duplicate Result:	16.716	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.118	
MS Numerical Performance Indicator:	-3.408	
MSD Numerical Performance Indicator:	-1.101	
MS Percent Recovery:	87.64%	
MSD Percent Recovery:	95.89%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92567366023	
Sample MS I.D.	92567366024	
Sample MSD I.D.	92567366025	
Sample Matrix Spike Result:	16.615	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.188	
Sample Matrix Spike Duplicate Result:	16.716	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.118	
Duplicate Numerical Performance Indicator:	-0.120	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.00%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

12/3/21

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
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(704)875-9092

January 21, 2022

Laura Midkiff
Alabama Power
744 Highway 87
GSC #8
Calera, AL 35040

RE: Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Dear Laura Midkiff:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Greensburg

(Greensburg, PA) - Revision 1 - This report replaces the January, 13, 2022 report. This project was revised on January, 20, 2022 to update 92567366035 results.

(Greensburg, PA) - Revision 2 - This report replaces the January, 20, 2022 report. This project was revised on January, 21, 2022 to correct the revision 1 note. Revision 1 replaces the December, 13, 2022 report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Nicole D'Oleo

Nicole D'Oleo
nicole.d'oleo@pacelabs.com
(704)875-9092
Project Manager

Enclosures

cc: Brooke Caton, Alabama Power
Renee Jernigan, Alabama Power

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CERTIFICATIONS

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Pace Analytical Services Pennsylvania
1638 Roseytown Rd Suites 2,3&4, Greensburg, PA 15601
ANAB DOD-ELAP Rad Accreditation #: L2417
Alabama Certification #: 41590
Arizona Certification #: AZ0734
Arkansas Certification
California Certification #: 04222CA
Colorado Certification #: PA01547
Connecticut Certification #: PH-0694
Delaware Certification
EPA Region 4 DW Rad
Florida/TNI Certification #: E87683
Georgia Certification #: C040
Florida: Cert E871149 SEKS WET
Guam Certification
Hawaii Certification
Idaho Certification
Illinois Certification
Indiana Certification
Iowa Certification #: 391
Kansas/TNI Certification #: E-10358
Kentucky Certification #: KY90133
KY WW Permit #: KY0098221
KY WW Permit #: KY0000221
Louisiana DHH/TNI Certification #: LA180012
Louisiana DEQ/TNI Certification #: 4086
Maine Certification #: 2017020
Maryland Certification #: 308
Massachusetts Certification #: M-PA1457
Michigan/PADEP Certification #: 9991
Missouri Certification #: 235
Montana Certification #: Cert0082
Nebraska Certification #: NE-OS-29-14
Nevada Certification #: PA014572018-1
New Hampshire/TNI Certification #: 297617
New Jersey/TNI Certification #: PA051
New Mexico Certification #: PA01457
New York/TNI Certification #: 10888
North Carolina Certification #: 42706
North Dakota Certification #: R-190
Ohio EPA Rad Approval: #41249
Oregon/TNI Certification #: PA200002-010
Pennsylvania/TNI Certification #: 65-00282
Puerto Rico Certification #: PA01457
Rhode Island Certification #: 65-00282
South Dakota Certification
Tennessee Certification #: 02867
Texas/TNI Certification #: T104704188-17-3
Utah/TNI Certification #: PA014572017-9
USDA Soil Permit #: P330-17-00091
Vermont Dept. of Health: ID# VT-0282
Virgin Island/PADEP Certification
Virginia/VELAP Certification #: 9526
Washington Certification #: C868
West Virginia DEP Certification #: 143
West Virginia DHHR Certification #: 9964C
Wisconsin Approve List for Rad
Wyoming Certification #: 8TMS-L

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SAMPLE SUMMARY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92567366001	BB18676 PZ-2	Water	10/05/21 11:00	10/19/21 00:00
92567366002	BB18677 MW-6	Water	10/05/21 12:10	10/19/21 00:00
92567366003	BB18677 MW-6 MS	Water	10/05/21 12:10	10/19/21 00:00
92567366004	BB18677 MW-6 MSD	Water	10/05/21 12:10	10/19/21 00:00
92567366005	BB18678 MW-3	Water	10/05/21 13:25	10/19/21 00:00
92567366006	BB18679 MW-4	Water	10/05/21 14:35	10/19/21 00:00
92567366007	BB18680 MW-4 DUP	Water	10/05/21 14:35	10/19/21 00:00
92567366008	BB18681 FB-1	Water	10/05/21 15:30	10/19/21 00:00
92567366009	BB18682 MW-17	Water	10/06/21 08:45	10/19/21 00:00
92567366010	BB18683 MW-16	Water	10/06/21 10:10	10/19/21 00:00
92567366011	BB18747 EB-2	Water	10/05/21 10:20	10/19/21 00:00
92567366012	BB18748 PZ-1	Water	10/05/21 11:00	10/19/21 00:00
92567366013	BB18748 PZ-1 MS	Water	10/05/21 11:00	10/19/21 00:00
92567366014	BB18748 PZ-1 MSD	Water	10/05/21 11:00	10/19/21 00:00
92567366015	BB18749 MW-5	Water	10/05/21 11:53	10/19/21 00:00
92567366016	BB18750 MW-5 DUP	Water	10/05/21 11:53	10/19/21 00:00
92567366017	BB18751 MW-12	Water	10/05/21 12:58	10/19/21 00:00
92567366018	BB18752 MW-1	Water	10/05/21 14:18	10/19/21 00:00
92567366019	BB18753 MW-7	Water	10/05/21 15:11	10/19/21 00:00
92567366020	BB18754 MW-2VA	Water	10/06/21 10:25	10/19/21 00:00
92567366021	BB18755 MW-21VC	Water	10/06/21 12:46	10/19/21 00:00
92567366022	BB18756 FB-2	Water	10/06/21 13:15	10/19/21 00:00
92567366023	BB19012 MW-22VB	Water	10/11/21 11:37	10/19/21 00:00
92567366024	BB19012 MW-22VB MS	Water	10/11/21 11:37	10/19/21 00:00
92567366025	BB19012 MW-22VB MSD	Water	10/11/21 11:37	10/19/21 00:00
92567366026	BB19013 MW-19H	Water	10/11/21 12:57	10/19/21 00:00
92567366027	BB19014 MW-2	Water	10/11/21 14:49	10/19/21 00:00
92567366028	BB19015 FB-3	Water	10/11/21 15:15	10/19/21 00:00
92567366029	BB19016 MW-2VB	Water	10/12/21 09:28	10/19/21 00:00
92567366030	BB19017 MW-18H	Water	10/12/21 11:17	10/19/21 00:00
92567366031	BB19018 PZ-5	Water	10/12/21 12:16	10/19/21 00:00
92567366032	BB19019 PZ-6	Water	10/12/21 13:40	10/19/21 00:00
92567366033	BB19020 MW-4V	Water	10/11/21 12:40	10/19/21 00:00
92567366034	BB19021 MW-20H	Water	10/11/21 13:30	10/19/21 00:00
92567366035	BB19022 MW-10	Water	10/11/21 14:40	10/19/21 00:00
92567366036	BB19023 MW-14	Water	10/12/21 08:30	10/19/21 00:00
92567366037	BB19024 MW-14 DUP	Water	10/12/21 08:30	10/19/21 00:00

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE SUMMARY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	Matrix	Date Collected	Date Received
92567366038	**BB19025 MW-8**	Water	10/12/21 10:48	10/19/21 00:00
92567366039	**BB19026 MW-9**	Water	10/12/21 11:55	10/19/21 00:00
92567366040	**BB19027 MW-11**	Water	10/12/21 12:55	10/19/21 00:00
92567366041	**BB19028 EB-1**	Water	10/12/21 13:30	10/19/21 00:00

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92567366001	**BB18676 PZ-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366002	**BB18677 MW-6**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366003	**BB18677 MW-6 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366004	**BB18677 MW-6 MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366005	**BB18678 MW-3**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366006	**BB18679 MW-4**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366007	**BB18680 MW-4 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366008	**BB18681 FB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366009	**BB18682 MW-17**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366010	**BB18683 MW-16**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366011	**BB18747 EB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366012	**BB18748 PZ-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366013	**BB18748 PZ-1 MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
92567366014	**BB18748 PZ-1 MSD**	EPA 9315	LAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 9320	VAL	1	PASI-PA
92567366015	**BB18749 MW-5**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366016	**BB18750 MW-5 DUP**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366017	**BB18751 MW-12**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366018	**BB18752 MW-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366019	**BB18753 MW-7**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366020	**BB18754 MW-2VA**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366021	**BB18755 MW-21VC**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366022	**BB18756 FB-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366023	**BB19012 MW-22VB**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366024	**BB19012 MW-22VB MS**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366025	**BB19012 MW-22VB MSD**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
92567366026	**BB19013 MW-19H**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366027	**BB19014 MW-2**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
92567366028	BB19015 FB-3	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366029	BB19016 MW-2VB	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366030	BB19017 MW-18H	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366031	BB19018 PZ-5	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366032	BB19019 PZ-6	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366033	BB19020 MW-4V	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366034	BB19021 MW-20H	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366035	BB19022 MW-10	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366036	BB19023 MW-14	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366037	BB19024 MW-14 DUP	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366038	BB19025 MW-8	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366039	BB19026 MW-9	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
92567366040	**BB19027 MW-11**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	VAL	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
92567366041	**BB19028 EB-1**	EPA 9315	LAL	1	PASI-PA
		EPA 9320	JC2	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Date: January 21, 2022

BB19022 MW-10 (Lab ID: 92567366035)

- CLient requested investigation on results for sample 92567366035. Sample was recounted. Detector originally used appears to have been the issue. Recount results have been reported, and original results cancelled.

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: January 21, 2022

General Information:
41 samples were analyzed for EPA 9315 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: January 21, 2022

General Information:
41 samples were analyzed for EPA 9320 by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: January 21, 2022

General Information:
35 samples were analyzed for Total Radium Calculation by Pace Analytical Services Greensburg. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18676 PZ-2 **Lab ID: 92567366001** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.184U ± 0.173 (0.315) C:93% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.941 ± 0.426 (0.713) C:82% T:83%**	pCi/L	11/08/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.13 ± 0.599 (1.03)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18677 MW-6 **Lab ID: 92567366002** Collected: 10/05/21 12:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.107U ± 0.155 (0.335) C:93% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.25 ± 0.527 (0.863) C:78% T:81%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.36 ± 0.682 (1.20)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18677 MW-6 MS **Lab ID: 92567366003** Collected: 10/05/21 12:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**98.32 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**130.33 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/08/21 14:35	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18677 MW-6 MSD **Lab ID: 92567366004** Collected: 10/05/21 12:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**106.30 %REC 7.80 RPD ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**145.98 %REC 11.33 RPD ± NA (NA) C:NA T:NA**	pCi/L	11/08/21 14:35	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18678 MW-3 **Lab ID: 92567366005** Collected: 10/05/21 13:25 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.231U ± 0.176 (0.310) C:97% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.98 ± 0.812 (0.891) C:74% T:80%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.21 ± 0.988 (1.20)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18679 MW-4 **Lab ID: 92567366006** Collected: 10/05/21 14:35 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.804 ± 0.308 (0.341) C:97% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.950 ± 0.474 (0.839) C:74% T:88%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.75 ± 0.782 (1.18)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18680 MW-4 DUP **Lab ID: 92567366007** Collected: 10/05/21 14:35 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.366 ± 0.205 (0.300) C:99% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.943 ± 0.429 (0.705) C:72% T:93%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.31 ± 0.634 (1.01)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18681 FB-1 **Lab ID: 92567366008** Collected: 10/05/21 15:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.0744U ± 0.0619 (0.273) C:99% T:NA**	pCi/L	12/03/21 08:48	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.16 ± 0.489 (0.798) C:75% T:91%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16 ± 0.551 (1.07)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18682 MW-17 **Lab ID: 92567366009** Collected: 10/06/21 08:45 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.319U ± 0.217 (0.394) C:99% T:NA**	pCi/L	12/03/21 08:28	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.69 ± 0.600 (0.871) C:71% T:83%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.01 ± 0.817 (1.27)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18683 MW-16 **Lab ID: 92567366010** Collected: 10/06/21 10:10 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.193U ± 0.270 (0.597) C:91% T:NA**	pCi/L	12/03/21 08:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.962 ± 0.486 (0.852) C:73% T:82%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16U ± 0.756 (1.45)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18747 EB-2 **Lab ID: 92567366011** Collected: 10/05/21 10:20 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**-0.145U ± 0.196 (0.564) C:91% T:NA**	pCi/L	12/03/21 08:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.87 ± 0.757 (0.795) C:78% T:88%**	pCi/L	11/08/21 14:35	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.87 ± 0.953 (1.36)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18748 PZ-1 **Lab ID: 92567366012** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0760U ± 0.174 (0.406) C:92% T:NA**	pCi/L	12/03/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.99 ± 0.628 (0.844) C:71% T:86%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.07 ± 0.802 (1.25)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18748 PZ-1 MS **Lab ID: 92567366013** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**105.98 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**63.31 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/15/21 11:01	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18748 PZ-1 MSD **Lab ID: 92567366014** Collected: 10/05/21 11:00 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**94.82 %REC 11.11 RPD ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**70.69 %REC 11.03 RPD ± NA (NA) C:NA T:NA**	pCi/L	11/15/21 11:01	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18749 MW-5 **Lab ID: 92567366015** Collected: 10/05/21 11:53 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.332U ± 0.225 (0.408) C:95% T:NA**	pCi/L	12/03/21 14:09	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.11 ± 0.465 (0.750) C:73% T:94%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.44 ± 0.690 (1.16)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18750 MW-5 DUP **Lab ID: 92567366016** Collected: 10/05/21 11:53 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.231U ± 0.182 (0.329) C:95% T:NA**	pCi/L	12/03/21 14:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.28 ± 0.510 (0.787) C:75% T:83%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.51 ± 0.692 (1.12)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18751 MW-12 **Lab ID: 92567366017** Collected: 10/05/21 12:58 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.214U ± 0.194 (0.383) C:95% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.27 ± 0.493 (0.760) C:77% T:88%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.48 ± 0.687 (1.14)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18752 MW-1 **Lab ID: 92567366018** Collected: 10/05/21 14:18 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.812 ± 0.281 (0.218) C:95% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.395U ± 0.408 (0.845) C:75% T:83%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.21 ± 0.689 (1.06)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18753 MW-7 **Lab ID: 92567366019** Collected: 10/05/21 15:11 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.402 ± 0.215 (0.318) C:96% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.869 ± 0.441 (0.783) C:80% T:89%**	pCi/L	11/08/21 14:36	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.27 ± 0.656 (1.10)**	pCi/L	12/03/21 16:58	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18754 MW-2VA **Lab ID: 92567366020** Collected: 10/06/21 10:25 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.458 ± 0.242 (0.356) C:89% T:NA**	pCi/L	12/03/21 08:12	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.288U ± 0.313 (0.651) C:85% T:89%**	pCi/L	11/08/21 11:15	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.746U ± 0.555 (1.01)**	pCi/L	12/03/21 16:58	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18755 MW-21VC **Lab ID: 92567366021** Collected: 10/06/21 12:46 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.243U ± 0.261 (0.554) C:96% T:NA**	pCi/L	12/03/21 08:13	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.54 ± 0.558 (0.847) C:74% T:88%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.78 ± 0.819 (1.40)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB18756 FB-2 **Lab ID: 92567366022** Collected: 10/06/21 13:15 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.246U ± 0.221 (0.433) C:97% T:NA**	pCi/L	12/03/21 08:32	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.412U ± 0.393 (0.806) C:71% T:85%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.658U ± 0.614 (1.24)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19012 MW-22VB **Lab ID: 92567366023** Collected: 10/11/21 11:37 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.18 ± 0.378 (0.361) C:80% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.113U ± 0.360 (0.812) C:70% T:85%**	pCi/L	11/17/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.29 ± 0.738 (1.17)**	pCi/L	12/03/21 17:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19012 MW-22VB MS **Lab ID: 92567366024** Collected: 10/11/21 11:37 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**87.64 %REC ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**88.82 %REC ± NA (NA) C:NA T:NA**	pCi/L	11/17/21 11:24	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19012 MW-22VB MSD **Lab ID: 92567366025** Collected: 10/11/21 11:37 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**95.89 %REC 9.00 RPD ± NA (NA) C:NA T:NA**	pCi/L	12/03/21 08:20	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**91.27 %REC 2.72 RPD ± NA (NA) C:NA T:NA**	pCi/L	11/17/21 11:24	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19013 MW-19H **Lab ID: 92567366026** Collected: 10/11/21 12:57 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.202U ± 0.185 (0.364) C:96% T:NA**	pCi/L	12/03/21 08:37	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0132U ± 0.345 (0.813) C:68% T:84%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.202U ± 0.530 (1.18)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19014 MW-2 **Lab ID: 92567366027** Collected: 10/11/21 14:49 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.569 ± 0.264 (0.390) C:101% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.81 ± 0.567 (0.728) C:70% T:89%**	pCi/L	11/15/21 11:01	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.38 ± 0.831 (1.12)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19015 FB-3 **Lab ID: 92567366028** Collected: 10/11/21 15:15 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.109U ± 0.225 (0.520) C:87% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.898 ± 0.440 (0.760) C:69% T:88%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.01U ± 0.665 (1.28)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19016 MW-2VB **Lab ID: 92567366029** Collected: 10/12/21 09:28 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0902U ± 0.202 (0.471) C:97% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.233U ± 0.374 (0.812) C:70% T:82%**	pCi/L	11/15/21 11:00	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.323U ± 0.576 (1.28)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19017 MW-18H **Lab ID: 92567366030** Collected: 10/12/21 11:17 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.0898U ± 0.136 (0.299) C:91% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.293U ± 0.376 (0.800) C:70% T:84%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.383U ± 0.512 (1.10)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19018 PZ-5 **Lab ID: 92567366031** Collected: 10/12/21 12:16 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.114U ± 0.167 (0.368) C:89% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.849 ± 0.420 (0.741) C:72% T:96%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.963U ± 0.587 (1.11)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19019 PZ-6 **Lab ID: 92567366032** Collected: 10/12/21 13:40 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.823 ± 0.312 (0.397) C:97% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.743U ± 0.445 (0.832) C:71% T:85%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.57 ± 0.757 (1.23)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19020 MW-4V **Lab ID: 92567366033** Collected: 10/11/21 12:40 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.410U ± 0.254 (0.425) C:95% T:NA**	pCi/L	12/03/21 08:38	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.17 ± 0.511 (0.850) C:68% T:85%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.58 ± 0.765 (1.28)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19021 MW-20H **Lab ID: 92567366034** Collected: 10/11/21 13:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.506 ± 0.236 (0.289) C:94% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.585U ± 0.455 (0.906) C:70% T:82%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.09U ± 0.691 (1.20)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19022 MW-10 **Lab ID: 92567366035** Collected: 10/11/21 14:40 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.330 ± 0.189 (0.269) C:94% T:NA**	pCi/L	01/18/22 13:44	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.448U ± 0.397 (0.810) C:71% T:93%**	pCi/L	11/15/21 11:02	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.778U ± 0.586 (1.08)**	pCi/L	01/19/22 18:25	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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(704)875-9092

ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19023 MW-14 **Lab ID: 92567366036** Collected: 10/12/21 08:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**1.14 ± 0.388 (0.450) C:94% T:NA**	pCi/L	12/03/21 08:39	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.468U ± 0.365 (0.724) C:74% T:87%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.61 ± 0.753 (1.17)**	pCi/L	12/03/21 17:05	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19024 MW-14 DUP **Lab ID: 92567366037** Collected: 10/12/21 08:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.526 ± 0.280 (0.415) C:94% T:NA**	pCi/L	12/03/21 10:16	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.08 ± 0.493 (0.837) C:73% T:82%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.61 ± 0.773 (1.25)**	pCi/L	12/03/21 17:05	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19025 MW-8 **Lab ID: 92567366038** Collected: 10/12/21 10:48 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.291U ± 0.209 (0.346) C:95% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0878U ± 0.347 (0.820) C:76% T:85%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.291U ± 0.556 (1.17)**	pCi/L	12/03/21 17:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19026 MW-9 **Lab ID: 92567366039** Collected: 10/12/21 11:55 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.311U ± 0.242 (0.454) C:95% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**-0.0569U ± 0.341 (0.797) C:76% T:91%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.311U ± 0.583 (1.25)**	pCi/L	12/03/21 17:11	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19027 MW-11 **Lab ID: 92567366040** Collected: 10/12/21 12:55 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.641 ± 0.322 (0.528) C:102% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.374U ± 0.383 (0.796) C:70% T:89%**	pCi/L	11/15/21 11:03	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.02U ± 0.705 (1.32)**	pCi/L	12/03/21 17:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Sample: BB19028 EB-1 **Lab ID: 92567366041** Collected: 10/12/21 13:30 Received: 10/19/21 00:00 Matrix: Water
PWS: Site ID: Sample Type:

Parameters	Method	Act ± Unc (MDC) Carr Trac	Units	Analyzed	CAS No.	Qual
	Pace Analytical Services - Greensburg					
Radium-226	EPA 9315	**0.338U ± 0.217 (0.350) C:85% T:NA**	pCi/L	12/03/21 08:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0413U ± 0.298 (0.692) C:68% T:85%**	pCi/L	11/17/21 11:24	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.379U ± 0.515 (1.04)**	pCi/L	12/03/21 17:11	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

QC Batch: 470012 | Analysis Method: EPA 9315
QC Batch Method: EPA 9315 | Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366038, 92567366039, 92567366040, 92567366041

METHOD BLANK: 2269081 Matrix: Water
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366038, 92567366039, 92567366040, 92567366041

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.522 ± 0.345 (0.615) C:92% T:NA	pCi/L	12/03/21 08:39	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

QC Batch: 470011
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037

METHOD BLANK: 2269079
Matrix: Water
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.276 ± 0.303 (0.633) C:96% T:NA	pCi/L	12/03/21 08:13	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

QC Batch: 470829 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366041

METHOD BLANK: 2272897 Matrix: Water
Associated Lab Samples: 92567366023, 92567366024, 92567366025, 92567366041

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.00736 ± 0.282 (0.665) C:71% T:86%	pCi/L	11/17/21 14:28	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

QC Batch: 470828
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037, 92567366038, 92567366039, 92567366040

METHOD BLANK: 2272896
Matrix: Water
Associated Lab Samples: 92567366012, 92567366013, 92567366014, 92567366021, 92567366022, 92567366026, 92567366027, 92567366028, 92567366029, 92567366030, 92567366031, 92567366032, 92567366033, 92567366034, 92567366035, 92567366036, 92567366037, 92567366038, 92567366039, 92567366040

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.309 ± 0.352 (0.742) C:77% T:92%	pCi/L	11/15/21 11:01	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

QC Batch: 470009
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

METHOD BLANK: 2269074
Matrix: Water
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0230 ± 0.117 (0.365) C:97% T:NA	pCi/L	12/03/21 08:48	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

QC Batch: 470827
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

METHOD BLANK: 2272895
Matrix: Water
Associated Lab Samples: 92567366001, 92567366002, 92567366003, 92567366004, 92567366005, 92567366006, 92567366007, 92567366008, 92567366009, 92567366010, 92567366011, 92567366015, 92567366016, 92567366017, 92567366018, 92567366019, 92567366020

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.897 ± 0.395 (0.647) C:80% T:87%	pCi/L	11/08/21 11:14	

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QUALIFIERS

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

Acid preservation may not be appropriate for 2 Chloroethylvinyl ether.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Act - Activity

Unc - Uncertainty: SDWA = 1.96 sigma count uncertainty, all other matrices = Expanded Uncertainty (95% confidence interval). Gamma Spec = Expanded Uncertainty (95.4% Confidence Interval)

(MDC) - Minimum Detectable Concentration

Trac - Tracer Recovery (%)

Carr - Carrier Recovery (%)

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 92567366035

[1] CLient requested investigation on results for sample 92567366035. Sample was recounted. Detector originally used appears to have been the issue. Recount results have been reported, and original results cancelled.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92567366001	**BB18676 PZ-2**	EPA 9315	470009		
92567366002	**BB18677 MW-6**	EPA 9315	470009		
92567366003	**BB18677 MW-6 MS**	EPA 9315	470009		
92567366004	**BB18677 MW-6 MSD**	EPA 9315	470009		
92567366005	**BB18678 MW-3**	EPA 9315	470009		
92567366006	**BB18679 MW-4**	EPA 9315	470009		
92567366007	**BB18680 MW-4 DUP**	EPA 9315	470009		
92567366008	**BB18681 FB-1**	EPA 9315	470009		
92567366009	**BB18682 MW-17**	EPA 9315	470009		
92567366010	**BB18683 MW-16**	EPA 9315	470009		
92567366011	**BB18747 EB-2**	EPA 9315	470009		
92567366012	**BB18748 PZ-1**	EPA 9315	470011		
92567366013	**BB18748 PZ-1 MS**	EPA 9315	470011		
92567366014	**BB18748 PZ-1 MSD**	EPA 9315	470011		
92567366015	**BB18749 MW-5**	EPA 9315	470009		
92567366016	**BB18750 MW-5 DUP**	EPA 9315	470009		
92567366017	**BB18751 MW-12**	EPA 9315	470009		
92567366018	**BB18752 MW-1**	EPA 9315	470009		
92567366019	**BB18753 MW-7**	EPA 9315	470009		
92567366020	**BB18754 MW-2VA**	EPA 9315	470009		
92567366021	**BB18755 MW-21VC**	EPA 9315	470011		
92567366022	**BB18756 FB-2**	EPA 9315	470011		
92567366023	**BB19012 MW-22VB**	EPA 9315	470012		
92567366024	**BB19012 MW-22VB MS**	EPA 9315	470012		
92567366025	**BB19012 MW-22VB MSD**	EPA 9315	470012		
92567366026	**BB19013 MW-19H**	EPA 9315	470011		
92567366027	**BB19014 MW-2**	EPA 9315	470011		
92567366028	**BB19015 FB-3**	EPA 9315	470011		
92567366029	**BB19016 MW-2VB**	EPA 9315	470011		
92567366030	**BB19017 MW-18H**	EPA 9315	470011		
92567366031	**BB19018 PZ-5**	EPA 9315	470011		
92567366032	**BB19019 PZ-6**	EPA 9315	470011		
92567366033	**BB19020 MW-4V**	EPA 9315	470011		
92567366034	**BB19021 MW-20H**	EPA 9315	470011		
92567366035	**BB19022 MW-10**	EPA 9315	470011		
92567366036	**BB19023 MW-14**	EPA 9315	470011		
92567366037	**BB19024 MW-14 DUP**	EPA 9315	470011		
92567366038	**BB19025 MW-8**	EPA 9315	470012		
92567366039	**BB19026 MW-9**	EPA 9315	470012		
92567366040	**BB19027 MW-11**	EPA 9315	470012		
92567366041	**BB19028 EB-1**	EPA 9315	470012		
92567366001	**BB18676 PZ-2**	EPA 9320	470827		
92567366002	**BB18677 MW-6**	EPA 9320	470827		
92567366003	**BB18677 MW-6 MS**	EPA 9320	470827		
92567366004	**BB18677 MW-6 MSD**	EPA 9320	470827		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92567366005	**BB18678 MW-3**	EPA 9320	470827		
92567366006	**BB18679 MW-4**	EPA 9320	470827		
92567366007	**BB18680 MW-4 DUP**	EPA 9320	470827		
92567366008	**BB18681 FB-1**	EPA 9320	470827		
92567366009	**BB18682 MW-17**	EPA 9320	470827		
92567366010	**BB18683 MW-16**	EPA 9320	470827		
92567366011	**BB18747 EB-2**	EPA 9320	470827		
92567366012	**BB18748 PZ-1**	EPA 9320	470828		
92567366013	**BB18748 PZ-1 MS**	EPA 9320	470828		
92567366014	**BB18748 PZ-1 MSD**	EPA 9320	470828		
92567366015	**BB18749 MW-5**	EPA 9320	470827		
92567366016	**BB18750 MW-5 DUP**	EPA 9320	470827		
92567366017	**BB18751 MW-12**	EPA 9320	470827		
92567366018	**BB18752 MW-1**	EPA 9320	470827		
92567366019	**BB18753 MW-7**	EPA 9320	470827		
92567366020	**BB18754 MW-2VA**	EPA 9320	470827		
92567366021	**BB18755 MW-21VC**	EPA 9320	470828		
92567366022	**BB18756 FB-2**	EPA 9320	470828		
92567366023	**BB19012 MW-22VB**	EPA 9320	470829		
92567366024	**BB19012 MW-22VB MS**	EPA 9320	470829		
92567366025	**BB19012 MW-22VB MSD**	EPA 9320	470829		
92567366026	**BB19013 MW-19H**	EPA 9320	470828		
92567366027	**BB19014 MW-2**	EPA 9320	470828		
92567366028	**BB19015 FB-3**	EPA 9320	470828		
92567366029	**BB19016 MW-2VB**	EPA 9320	470828		
92567366030	**BB19017 MW-18H**	EPA 9320	470828		
92567366031	**BB19018 PZ-5**	EPA 9320	470828		
92567366032	**BB19019 PZ-6**	EPA 9320	470828		
92567366033	**BB19020 MW-4V**	EPA 9320	470828		
92567366034	**BB19021 MW-20H**	EPA 9320	470828		
92567366035	**BB19022 MW-10**	EPA 9320	470828		
92567366036	**BB19023 MW-14**	EPA 9320	470828		
92567366037	**BB19024 MW-14 DUP**	EPA 9320	470828		
92567366038	**BB19025 MW-8**	EPA 9320	470828		
92567366039	**BB19026 MW-9**	EPA 9320	470828		
92567366040	**BB19027 MW-11**	EPA 9320	470828		
92567366041	**BB19028 EB-1**	EPA 9320	470829		
92567366001	**BB18676 PZ-2**	Total Radium Calculation	474984		
92567366002	**BB18677 MW-6**	Total Radium Calculation	474984		
92567366005	**BB18678 MW-3**	Total Radium Calculation	474984		
92567366006	**BB18679 MW-4**	Total Radium Calculation	474984		
92567366007	**BB18680 MW-4 DUP**	Total Radium Calculation	474984		
92567366008	**BB18681 FB-1**	Total Radium Calculation	474984		
92567366009	**BB18682 MW-17**	Total Radium Calculation	474984		
92567366010	**BB18683 MW-16**	Total Radium Calculation	474984		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
9800 Kincey Ave. Suite 100
Huntersville, NC 28078
(704)875-9092

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: GADSEDN ASH POND WMWGADAP_1341-Revised Report
Pace Project No.: 92567366

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
92567366011	**BB18747 EB-2**	Total Radium Calculation	474984		
92567366012	**BB18748 PZ-1**	Total Radium Calculation	474985		
92567366015	**BB18749 MW-5**	Total Radium Calculation	474984		
92567366016	**BB18750 MW-5 DUP**	Total Radium Calculation	474984		
92567366017	**BB18751 MW-12**	Total Radium Calculation	474984		
92567366018	**BB18752 MW-1**	Total Radium Calculation	474984		
92567366019	**BB18753 MW-7**	Total Radium Calculation	474984		
92567366020	**BB18754 MW-2VA**	Total Radium Calculation	474984		
92567366021	**BB18755 MW-21VC**	Total Radium Calculation	474985		
92567366022	**BB18756 FB-2**	Total Radium Calculation	474985		
92567366023	**BB19012 MW-22VB**	Total Radium Calculation	474986		
92567366026	**BB19013 MW-19H**	Total Radium Calculation	474985		
92567366027	**BB19014 MW-2**	Total Radium Calculation	474985		
92567366028	**BB19015 FB-3**	Total Radium Calculation	474985		
92567366029	**BB19016 MW-2VB**	Total Radium Calculation	474985		
92567366030	**BB19017 MW-18H**	Total Radium Calculation	474985		
92567366031	**BB19018 PZ-5**	Total Radium Calculation	474985		
92567366032	**BB19019 PZ-6**	Total Radium Calculation	474985		
92567366033	**BB19020 MW-4V**	Total Radium Calculation	474985		
92567366034	**BB19021 MW-20H**	Total Radium Calculation	474985		
92567366035	**BB19022 MW-10**	Total Radium Calculation	480068		
92567366036	**BB19023 MW-14**	Total Radium Calculation	474985		
92567366037	**BB19024 MW-14 DUP**	Total Radium Calculation	474985		
92567366038	**BB19025 MW-8**	Total Radium Calculation	474986		
92567366039	**BB19026 MW-9**	Total Radium Calculation	474986		
92567366040	**BB19027 MW-11**	Total Radium Calculation	474986		
92567366041	**BB19028 EB-1**	Total Radium Calculation	474986		

WO# : 92567366

92567366

Pittsburgh Lab Sample Condition Upon Receipt

Pace Analytical

Client Name: Pace NC Proj

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace Other ____

Label ☒

LIMS Login ☒

Tracking #: 532016279 3894

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☐ yes ☐ no

Thermometer Used --- Type of Ice: Wet Blue (None)

Cooler Temperature Observed Temp ___ °C Correction Factor: ___ °C Final Temp: ___ °C

Temp should be above freezing to 6°C

Comments:	Yes	No	N/A	pH paper Lot# 10104111 / Date and Initials of person examining contents: AL 10/20/21
Chain of Custody Present:	X			1.
Chain of Custody Filled Out:	X			2.
Chain of Custody Relinquished:		X		3.
Sampler Name & Signature on COC:		X		4.
Sample Labels match COC: -Includes date/time/ID Matrix: WT	X			5.
Samples Arrived within Hold Time:	X			6.
Short Hold Time Analysis (<72hr remaining):		X		7.
Rush Turn Around Time Requested:		X		8.
Sufficient Volume:	X			9.
Correct Containers Used: -Pace Containers Used:	X			10.
Containers Intact:	X			11.
Orthophosphate field filtered			X	12.
Hex Cr Aqueous sample field filtered			X	13.
Organic Samples checked for dechlorination:			X	14.
Filtered volume received for Dissolved tests			X	15.
All containers have been checked for preservation. exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, Non-aqueous matrix	X			16.
All containers meet method preservation requirements.	X			Initial when completed: AL Date/time of preservation: ___ Lot # of added preservative: ___
Headspace in VOA Vials (>6mm):			X	17.
Trip Blank Present:			X	18.
Trip Blank Custody Seals Present			X	
Rad Samples Screened < 0.5 mrem/hr	X			Initial when completed: AL Date: 10/20/21 Survey Meter SN: 1503

Client Notification/ Resolution:

Person Contacted: ___ Date/Time: ___ Contacted By: ___

Comments/ Resolution: ___

☐ **A check in this box indicates that additional information has been stored in ereports.**

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers)

*PM review is documented electronically in LIMS. When the Project Manager closes the SRF Review schedule in LIMS. The review is in the Status section of the Workorder Edit Screen.

WO# : 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page : 1 Of 4

Section A — Required Client Information:

Company:	Alabama Power Company
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040
Email To:	lbmidkif@southernco.com
Phone:	205-664-6197 Fax
Requested Due Date:	28 days

Section B — Required Project Information:

Report To:	Laura Midkiff
Copy To:	Brooke Caton & Renee Jernigan
Purchase Order #:	APC10700668
Project Name:	Plant Gadsden Ash Pond
Project Number:	WMWGADAP_1341

Section C — Invoice Information:

Attention:	Laura Midkiff
Company Name:	Alabama Power Co.
Address:	744 Highway 87 GSC Bldg #8
Pace Quote:	CCR
Pace Project Manager:	Kevin.Herring@pacelabs.com
Pace Profile #:	13805

Regulatory Agency:

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Du	Residual Chlorine (Y/N)
1	BB18676	PZ-2	GW	G	10/5/2021	11:00				1			X							X	X	X		
2	BB18677	MW-6	GW	G	10/5/2021	12:10				3			X							X	X	X	X	
3	BB18678	MW-3	GW	G	10/5/2021	13:25				1			X							X	X	X		
4	BB18679	MW-4	GW	G	10/5/2021	14:35				1			X							X	X	X		
5	BB18680	MW-4 DUP	GW	G	10/5/2021	14:35				1			X							X	X	X		
6	BB18681	FB-1	GW	G	10/5/2021	15:30				1			X							X	X	X		
7	BB18682	MW-17	GW	G	10/6/2021	8:45				1			X							X	X	X		
8	BB18683	MW-16	GW	G	10/6/2021	10:10				1			X							X	X	X		
9																								
10																								
11																								
12																								

MATRIX CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/19/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO# : 30446362

PM: RES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 2 Of 4

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC10700668	Pace Quote:	CCR
Phone:	205-664-6197 Fax	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Kevin.Herring@pacelabs.com
Requested Due Date:	28 days	Project Number:	WMWGADAP 1341	Pace Profile #:	13805

Regulatory Agency

State / Location: AL

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike Dup	Residual Chlorine (Y/N)
1	BB18747	EB-2	GW	G	10/5/2021	10:20				1			X							X	X	X		
2	BB18748	PZ-1	GW	G	10/5/2021	11:00				3			X							X	X	X	X	
3	BB18749	MW-5	GW	G	10/5/2021	11:53				1			X							X	X	X		
4	BB18750	MW-5 DUP	GW	G	10/5/2021	11:53				1			X							X	X	X		
5	BB18751	MW-12	GW	G	10/5/2021	12:58				1			X							X	X	X		
6	BB18752	MW-1	GW	G	10/5/2021	14:18				1			X							X	X	X		
7	BB18753	MW-7	GW	G	10/5/2021	15:11				1			X							X	X	X		
8	BB18754	MW-2VA	GW	G	10/6/2021	10:25				1			X							X	X	X		
9	BB18755	MW-21VC	GW	G	10/6/2021	12:46				1			X							X	X	X		
10	BB18756	FB-2	GW	G	10/6/2021	13:15				1			X							X	X	X		
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/14/21	0930	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

WO#: 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 3 Of 4

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8 Calera, AL 35040	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC10700668	Pace Quote:	CCR
Phone:	205-664-6197 Fax	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Kevin.Herring@pacelabs.com
Requested Due Date:	28 days	Project Number:	WMWGADAP_1341	Pace Profile #:	13805

Regulatory Agency	
State / Location	AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB19012	MW-22VB	GW	G	10/11/2021	11:37				3			X							X	X	X	X	
2	BB19013	MW-19H	GW	G	10/11/2021	12:57				1			X							X	X	X		
3	BB19014	MW-2	GW	G	10/11/2021	14:49				1			X							X	X	X		
4	BB19015	FB-3	GW	G	10/11/2021	15:15				1			X							X	X	X		
5	BB19016	MW-2VB	GW	G	10/12/2021	9:28				1			X							X	X	X		
6	BB19017	MW-18H	GW	G	10/12/2021	11:17				1			X							X	X	X		
7	BB19018	PZ-5	GW	G	10/12/2021	12:16				1			X							X	X	X		
8	BB19019	PZ-6	GW	G	10/12/2021	13:40				1			X							X	X	X		
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/14/21	0930	

SAMPLER NAME AND SIGNATURE			TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:						
SIGNATURE of SAMPLER:	DATE Signed:					

WO#: 30446362
PM: AES Due Date: 11/17/21
CLIENT: PACE_92_HUNC

CHAIN-OF-CUSTODY / Analytical Request Document

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Page : 4 Of 4

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Alabama Power Company	Report To:	Laura Midkiff	Attention:	Laura Midkiff
Address:	744 Highway 87 GSC Bldg #8	Copy To:	Brooke Caton & Renee Jernigan	Company Name:	Alabama Power Co.
	Calera, AL 35040			Address:	744 Highway 87 GSC Bldg #8
Email To:	lbmidkif@southernco.com	Purchase Order #:	APC10700668	Pace Quote:	CCR
Phone:	205-664-6197 Fax	Project Name:	Plant Gadsden Ash Pond	Pace Project Manager:	Kevin.Herring@pacelabs.com
Requested Due Date:	28 days	Project Number:	WMWGADAP_1341	Pace Profile #:	13805

Regulatory Agency

State / Location: AL

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Matrix Spike/Matrix Spike D	Residual Chlorine (Y/N)
1	BB19020	MW-4V	GW	G	10/11/2021	12:40				1			X							X	X	X		
2	BB19021	MW-20H	GW	G	10/11/2021	13:30				1			X							X	X	X		
3	BB19022	MW-10	GW	G	10/11/2021	14:40				1			X							X	X	X		
4	BB19023	MW-14	GW	G	10/12/2021	8:30				1			X							X	X	X		
5	BB19024	MW-14 DUP	GW	G	10/12/2021	8:30				1			X							X	X	X		
6	BB19025	MW-8	GW	G	10/12/2021	10:48				1			X							X	X	X		
7	BB19026	MW-9	GW	G	10/12/2021	11:55				1			X							X	X	X		
8	BB19027	MW-11	GW	G	10/12/2021	12:55				1			X							X	X	X		
9	BB19028	EB-1	GW	G	10/12/2021	13:30				1			X							X	X	X		
10																								
11																								
12																								

Matrix Codes: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Other OT; Tissue TS

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Laura Midkiff/ APC GTL	10/13/2021	12:45		10/14/21	0935	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed:

TEMP in C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

WO#: 30446362

PM: AES Due Date: 11/17/21

CLIENT: PACE_92_HUNC

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: JC2
Date: 11/4/2021
Worklist: 63440
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2272895
MB concentration:	0.897
M/B 2 Sigma CSU:	0.395
MB MDC:	0.647
MB Numerical Performance Indicator:	4.45
MB Status vs Numerical Indicator:	Fail*
MB Status vs. MDC:	See Comment*

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63440	LCSD63440
Count Date:	11/8/2021	
Spike I.D.:	21-029	
Decay Corrected Spike Concentration (pCi/mL):	37.538	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.817	
Target Conc. (pCi/L, g, F):	4.597	
Uncertainty (Calculated):	0.225	
Result (pCi/L, g, F):	4.495	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.001	
Numerical Performance Indicator:	-0.19	
Percent Recovery:	97.78%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366002	
Sample MS I.D.	92567366003	
Sample MSD I.D.	92567366004	
Spike I.D.:	21-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	37.961	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.803	
MS Target Conc.(pCi/L, g, F):	9.460	
MSD Aliquot (L, g, F):	0.812	
MSD Target Conc. (pCi/L, g, F):	9.345	
MS Spike Uncertainty (calculated):	0.464	
MSD Spike Uncertainty (calculated):	0.458	
Sample Result:	1.252	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.527	
Sample Matrix Spike Result:	13.581	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.628	
Sample Matrix Spike Duplicate Result:	14.894	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.862	
MS Numerical Performance Indicator:	2.068	
MSD Numerical Performance Indicator:	2.859	
MS Percent Recovery:	130.33%	
MSD Percent Recovery:	145.98%	
MS Status vs Numerical Indicator:	Warning	
MSD Status vs Numerical Indicator:	Warning	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	MSD High****	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92567366002
Sample MS I.D.	92567366003
Sample MSD I.D.	92567366004
Sample Matrix Spike Result:	13.581
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	2.628
Sample Matrix Spike Duplicate Result:	14.894
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	2.862
Duplicate Numerical Performance Indicator:	-0.662
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.33%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:
*The method blank result is below the reporting limit for this analysis and is acceptable. ✓

Passes NI criteria < 3 for NON-DW

11/10/21

11/10/21

Quality Control Sample Performance Assessment

Test: Ra-228
Analyst: VAL
Date: 11/8/2021
Worklist: 63441
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2272896
MB concentration:	0.309
M/B 2 Sigma CSU:	0.352
MB MDC:	0.742
MB Numerical Performance Indicator:	1.72
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63441	LCSD63441
Count Date:	11/15/2021	
Spike I.D.:	21-029	
Decay Corrected Spike Concentration (pCi/mL):	37.451	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.820	
Target Conc. (pCi/L, g, F):	4.566	
Uncertainty (Calculated):	0.224	
Result (pCi/L, g, F):	4.701	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.062	
Numerical Performance Indicator:	0.24	
Percent Recovery:	102.96%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366012	
Sample MS I.D.	92567366013	
Sample MSD I.D.	92567366014	
Spike I.D.:	21-029	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	37.961	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.809	
MS Target Conc.(pCi/L, g, F):	9.390	
MSD Aliquot (L, g, F):	0.809	
MSD Target Conc. (pCi/L, g, F):	9.384	
MS Spike Uncertainty (calculated):	0.460	
MSD Spike Uncertainty (calculated):	0.460	
Sample Result:	1.992	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.628	
Sample Matrix Spike Result:	7.936	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.635	
Sample Matrix Spike Duplicate Result:	8.626	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.744	
MS Numerical Performance Indicator:	-3.730	
MSD Numerical Performance Indicator:	-2.822	
MS Percent Recovery:	63.31%	
MSD Percent Recovery:	70.69%	
MS Status vs Numerical Indicator:	Fail****	
MSD Status vs Numerical Indicator:	Warning	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	135%	
MS/MSD Lower % Recovery Limits:	60%	

Duplicate Sample Assessment		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92567366012
Sample MS I.D.	92567366013
Sample MSD I.D.	92567366014
Sample Matrix Spike Result:	7.936
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.635
Sample Matrix Spike Duplicate Result:	8.626
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.744
Duplicate Numerical Performance Indicator:	-0.566
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.03%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

11/21/21
MS passes % Recovery criteria
11/22/21

~~****If all other QC criteria pass, this batch is acceptable. The matrix spike duplicate result indicates a possible bias for this sample only and may not be applicable to any other samples in this analytical batch.~~

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-228
Analyst: JC2
Date: 11/8/2021
Worklist: 63442
Matrix: WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2272897
MB concentration:	-0.007
M/B 2 Sigma CSU:	0.282
MB MDC:	0.665
MB Numerical Performance Indicator:	-0.05
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63442	LCSD63442
Count Date:	11/17/2021	
Spike I.D.:	21-029	
Decay Corrected Spike Concentration (pCi/mL):	37.425	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.819	
Target Conc. (pCi/L, g, F):	4.571	
Uncertainty (Calculated):	0.224	
Result (pCi/L, g, F):	5.057	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.123	
Numerical Performance Indicator:	0.83	
Percent Recovery:	110.62%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	135%	
Lower % Recovery Limits:	60%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/11/2021	10/18/2021
Sample I.D.	92567366023	92569905001
Sample MS I.D.	92567366024	92569905002
Sample MSD I.D.	92567366025	92569905003
Spike I.D.:	21-029	21-029
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	37.886	37.886
Spike Volume Used in MS (mL):	0.20	0.20
Spike Volume Used in MSD (mL):	0.20	0.20
MS Aliquot (L, g, F):	0.804	0.818
MS Target Conc.(pCi/L, g, F):	9.426	9.265
MSD Aliquot (L, g, F):	0.801	0.814
MSD Target Conc. (pCi/L, g, F):	9.465	9.305
MS Spike Uncertainty (calculated):	0.462	0.454
MSD Spike Uncertainty (calculated):	0.464	0.456
Sample Result:	0.113	0.982
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.360	0.443
Sample Matrix Spike Result:	8.485	10.705
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.737	2.130
Sample Matrix Spike Duplicate Result:	8.752	8.905
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.778	1.832
MS Numerical Performance Indicator:	-1.127	0.404
MSD Numerical Performance Indicator:	-0.865	-1.397
MS Percent Recovery:	88.82%	104.94%
MSD Percent Recovery:	91.27%	85.15%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Pass	Pass
MS Status vs Recovery:	Pass	Pass
MSD Status vs Recovery:	Pass	Pass
MS/MSD Upper % Recovery Limits:	135%	135%
MS/MSD Lower % Recovery Limits:	60%	60%

Duplicate Sample Assessment		
Sample I.D.:		Enter Duplicate sample IDs if other than LCS/LCSD in the space below.
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result 2 Sigma CSU (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result 2 Sigma CSU (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92567366023	92569905001
Sample MS I.D.	92567366024	92569905002
Sample MSD I.D.	92567366025	92569905003
Sample Matrix Spike Result:	8.485	10.705
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.737	2.130
Sample Matrix Spike Duplicate Result:	8.752	8.905
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.778	1.832
Duplicate Numerical Performance Indicator:	-0.210	1.256
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	2.72%	20.83%
MS/ MSD Duplicate Status vs Numerical Indicator:	Pass	Pass
MS/ MSD Duplicate Status vs RPD:	Pass	Pass
% RPD Limit:	36%	36%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

11/21/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	11/13/2021
Worklist:	63366
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2269079
MB concentration:	0.276
M/B Counting Uncertainty:	0.300
MB MDC:	0.633
MB Numerical Performance Indicator:	1.80
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS63366	LCSD63366
Count Date:	12/3/2021	12/3/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.032	24.032
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.202	0.207
Target Conc. (pCi/L, g, F):	11.923	11.615
Uncertainty (Calculated):	0.143	0.139
Result (pCi/L, g, F):	14.114	12.397
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.284	1.174
Numerical Performance Indicator:	3.32	1.30
Percent Recovery:	118.37%	106.73%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Pass
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366012	
Sample MS I.D.	92567366013	
Sample MSD I.D.	92567366014	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.033	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.306	
MS Target Conc.(pCi/L, g, F):	15.694	
MSD Aliquot (L, g, F):	0.292	
MSD Target Conc. (pCi/L, g, F):	16.471	
MS Spike Uncertainty (calculated):	0.188	
MSD Spike Uncertainty (calculated):	0.198	
Sample Result:	0.076	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.173	
Sample Matrix Spike Result:	16.708	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.130	
Sample Matrix Spike Duplicate Result:	15.694	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.110	
MS Numerical Performance Indicator:	1.587	
MSD Numerical Performance Indicator:	-1.465	
MS Percent Recovery:	105.98%	
MSD Percent Recovery:	94.82%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:	LCS63366	
Duplicate Sample I.D.	LCSD63366	
Sample Result (pCi/L, g, F):	14.114	
Sample Result Counting Uncertainty (pCi/L, g, F):	1.284	
Sample Duplicate Result (pCi/L, g, F):	12.397	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.174	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	1.935	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	10.34%	
Duplicate Status vs Numerical Indicator:	N/A	
Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92567366012	
Sample MS I.D.	92567366013	
Sample MSD I.D.	92567366014	
Sample Matrix Spike Result:	16.708	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.130	
Sample Matrix Spike Duplicate Result:	15.694	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.110	
Duplicate Numerical Performance Indicator:	1.254	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.11%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

12/3/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test: Ra-226
Analyst: LAL
Date: 11/13/2021
Worklist: 63365
Matrix: DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2269074
MB concentration:	-0.023
M/B Counting Uncertainty:	0.117
MB MDC:	0.365
MB Numerical Performance Indicator:	-0.39
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS63365	LCSD63365
Count Date:	12/3/2021	12/3/2021
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.032	24.032
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.212	0.205
Target Conc. (pCi/L, g, F):	11.315	11.715
Uncertainty (Calculated):	0.136	0.141
Result (pCi/L, g, F):	11.063	14.724
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.142	1.298
Numerical Performance Indicator:	-0.43	4.52
Percent Recovery:	97.77%	125.69%
Status vs Numerical Indicator:	N/A	N/A
Status vs Recovery:	Pass	Fail High****
Upper % Recovery Limits:	125%	125%
Lower % Recovery Limits:	75%	75%

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/5/2021	
Sample I.D.	92567366002	
Sample MS I.D.	92567366003	
Sample MSD I.D.	92567366004	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.033	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.260	
MS Target Conc.(pCi/L, g, F):	18.506	
MSD Aliquot (L, g, F):	0.287	
MSD Target Conc. (pCi/L, g, F):	16.727	
MS Spike Uncertainty (calculated):	0.222	
MSD Spike Uncertainty (calculated):	0.201	
Sample Result:	0.107	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.155	
Sample Matrix Spike Result:	18.302	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237	
Sample Matrix Spike Duplicate Result:	17.888	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.181	
MS Numerical Performance Indicator:	-0.482	
MSD Numerical Performance Indicator:	1.709	
MS Percent Recovery:	98.32%	
MSD Percent Recovery:	106.30%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment	
Sample I.D.:	LCS63365
Duplicate Sample I.D.	LCSD63365
Sample Result (pCi/L, g, F):	11.063
Sample Result Counting Uncertainty (pCi/L, g, F):	1.142
Sample Duplicate Result (pCi/L, g, F):	14.724
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.298
Are sample and/or duplicate results below RL?	NO
Duplicate Numerical Performance Indicator:	-4.151
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	24.99%
Duplicate Status vs Numerical Indicator:	N/A
Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Matrix Spike/Matrix Spike Duplicate Sample Assessment	
Sample I.D.	92567366002
Sample MS I.D.	92567366003
Sample MSD I.D.	92567366004
Sample Matrix Spike Result:	18.302
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.237
Sample Matrix Spike Duplicate Result:	17.888
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.181
Duplicate Numerical Performance Indicator:	0.474
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	7.80%
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A
MS/ MSD Duplicate Status vs RPD:	Pass
% RPD Limit:	25%

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments: LCSD fail high ok, all sample results < RL of 1.0 pCi/L
12/3/21

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-226
Analyst:	LAL
Date:	11/13/2021
Worklist:	63367
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2269081
MB concentration:	0.522
M/B Counting Uncertainty:	0.337
MB MDC:	0.615
MB Numerical Performance Indicator:	3.04
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS63367	LCSD63367
Count Date:	12/3/2021	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.032	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.201	
Target Conc. (pCi/L, g, F):	11.954	
Uncertainty (Calculated):	0.143	
Result (pCi/L, g, F):	12.295	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	1.198	
Numerical Performance Indicator:	0.55	
Percent Recovery:	102.85%	
Status vs Numerical Indicator:	N/A	
Status vs Recovery:	Pass	
Upper % Recovery Limits:	125%	
Lower % Recovery Limits:	75%	

Sample Matrix Spike Control Assessment	MS/MSD 1	MS/MSD 2
Sample Collection Date:	10/11/2021	
Sample I.D.	92567366023	
Sample MS I.D.	92567366024	
Sample MSD I.D.	92567366025	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.033	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.273	
MS Target Conc.(pCi/L, g, F):	17.614	
MSD Aliquot (L, g, F):	0.297	
MSD Target Conc. (pCi/L, g, F):	16.202	
MS Spike Uncertainty (calculated):	0.211	
MSD Spike Uncertainty (calculated):	0.194	
Sample Result:	1.179	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.338	
Sample Matrix Spike Result:	16.615	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.188	
Sample Matrix Spike Duplicate Result:	16.716	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.118	
MS Numerical Performance Indicator:	-3.408	
MSD Numerical Performance Indicator:	-1.101	
MS Percent Recovery:	87.64%	
MSD Percent Recovery:	95.89%	
MS Status vs Numerical Indicator:	N/A	
MSD Status vs Numerical Indicator:	N/A	
MS Status vs Recovery:	Pass	
MSD Status vs Recovery:	Pass	
MS/MSD Upper % Recovery Limits:	125%	
MS/MSD Lower % Recovery Limits:	75%	

Duplicate Sample Assessment		
Sample I.D.:		
Duplicate Sample I.D.		
Sample Result (pCi/L, g, F):		
Sample Result Counting Uncertainty (pCi/L, g, F):		
Sample Duplicate Result (pCi/L, g, F):		
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):		
Are sample and/or duplicate results below RL?	See Below ##	
Duplicate Numerical Performance Indicator:		
Duplicate RPD:		
Duplicate Status vs Numerical Indicator:		
Duplicate Status vs RPD:		
% RPD Limit:		

Matrix Spike/Matrix Spike Duplicate Sample Assessment		
Sample I.D.	92567366023	
Sample MS I.D.	92567366024	
Sample MSD I.D.	92567366025	
Sample Matrix Spike Result:	16.615	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.188	
Sample Matrix Spike Duplicate Result:	16.716	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.118	
Duplicate Numerical Performance Indicator:	-0.120	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	9.00%	
MS/ MSD Duplicate Status vs Numerical Indicator:	N/A	
MS/ MSD Duplicate Status vs RPD:	Pass	
% RPD Limit:	25%	

Evaluation of duplicate precision is not applicable if either the sample or duplicate results are below the MDC.

Comments:

12/3/21

Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: x2dfgent
PIN: 123654
Reason:

Submit

Date: 10/04/2021
Location: Gadsden Ash Pond
Collector: TJ Daugherty

Weather: Overcast 75

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1235	12.61	✔	✔	✔	✔	✔	
PZ-1	1313	8.60	✔	✔	✔	✔	✔	
MW-2	1214	12.51	✔	✔	✔	✔	✔	
MW-2V	1216	11.64	✔	✔	✔	✔	✔	
MW-2VA	1212	11.29	✔	✔	✔	✔	✔	
MW-2VB	1220	9.05	✔	✔	✔	✔	✔	
MW-2VC	1219	39.71	✔	✔	✔	✔	✔	Well is mid-development and had not ha
PZ-2	1308	8.16	✔	✔	✔	✔	✔	
MW-3	1336	13.09	✔	✔	✔	✔	✔	
MW-4	1338	6.90	✔	✔	✔	✔	✔	
MW-4V	1343	6.82	✔	✔	✔	✔	✔	
MW-5	1311	5.11	✔	✔	✔	✔	✔	
PZ-5	1327	11.12	✔	✔	✔	✔	✔	
MW-6	1304	5.04	✔	✔	✔	✔	✔	
PZ-6	1318	6.42	✔	✔	✔	✔	✔	
MW-7	1300	11.61	✔	✔	✔	✔	✔	
MW-8	1253	11.19	✔	✔	✔	✔	✔	
MW-9	1257	12.30	✔	✔	✔	✔	✔	
MW-10	1249	21.72	✔	✔	✔	✔	✔	
MW-11	1245	8.72	✔	✔	✔	✔	✔	
MW-12	1239	10.61	✔	✔	✔	✔	✔	
MW-13	1430	27.54	✔	✔	✔	✔	✔	
MW-14	1422	21.49	✔	✔	✔	✔	✔	
MW-15	1404	20.33	✔	✔	✔	✔	✔	
MW-16	1416	25.74	✔	✔	✔	✔	✔	
MW-17	1410	19.22	✔	✔	✔	✔	✔	
MW-18H	1331	11.31	✔	✔	✔	✔	✔	
MW-19H	1347	0	✔	✔	✔	✔	✔	
MW-20H	1341	3.02	✔	✔	✔	✔	✔	
MW-21VB	1224	52.71	✔	✔	✔	✔	✔	Well is mid-development and had not ha
MW-21VC	1222	8.04	✔	✔	✔	✔	✔	
MW-22VB	1226	4.71	✔	✔	✔	✔	✔	
MW-23VB	1322	8.61	✔	✔	✔	✔	✔	

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-3	10/5/2021 13:06	Conductivity	625.28	uS/cm
APCO-GSD-AP-MW-3	10/5/2021 13:06	DO	0.09	mg/L
APCO-GSD-AP-MW-3	10/5/2021 13:06	Depth to Water Detail	13.2	ft
APCO-GSD-AP-MW-3	10/5/2021 13:06	Oxidation Reduction Potention	106	mv
APCO-GSD-AP-MW-3	10/5/2021 13:06	pH	5.79	SU
APCO-GSD-AP-MW-3	10/5/2021 13:06	Temperature	21.3	C
APCO-GSD-AP-MW-3	10/5/2021 13:06	Turbidity	0.83	NTU
APCO-GSD-AP-MW-3	10/5/2021 13:11	Conductivity	624.32	uS/cm
APCO-GSD-AP-MW-3	10/5/2021 13:11	DO	0.08	mg/L
APCO-GSD-AP-MW-3	10/5/2021 13:11	Depth to Water Detail	13.2	ft
APCO-GSD-AP-MW-3	10/5/2021 13:11	Oxidation Reduction Potention	103.83	mv
APCO-GSD-AP-MW-3	10/5/2021 13:11	pH	5.81	SU
APCO-GSD-AP-MW-3	10/5/2021 13:11	Temperature	21.26	C
APCO-GSD-AP-MW-3	10/5/2021 13:11	Turbidity	0.42	NTU
APCO-GSD-AP-MW-3	10/5/2021 13:16	Conductivity	622.8	uS/cm
APCO-GSD-AP-MW-3	10/5/2021 13:16	DO	0.07	mg/L
APCO-GSD-AP-MW-3	10/5/2021 13:16	Depth to Water Detail	13.2	ft
APCO-GSD-AP-MW-3	10/5/2021 13:16	Oxidation Reduction Potention	102.03	mv
APCO-GSD-AP-MW-3	10/5/2021 13:16	pH	5.82	SU
APCO-GSD-AP-MW-3	10/5/2021 13:16	Temperature	21.27	C
APCO-GSD-AP-MW-3	10/5/2021 13:16	Turbidity	0.68	NTU
APCO-GSD-AP-MW-3	10/5/2021 13:21	Conductivity	622.14	uS/cm
APCO-GSD-AP-MW-3	10/5/2021 13:21	DO	0.07	mg/L
APCO-GSD-AP-MW-3	10/5/2021 13:21	Depth to Water Detail	13.2	ft
APCO-GSD-AP-MW-3	10/5/2021 13:21	Oxidation Reduction Potention	103.16	mv
APCO-GSD-AP-MW-3	10/5/2021 13:21	pH	5.76	SU
APCO-GSD-AP-MW-3	10/5/2021 13:21	Temperature	21.28	C
APCO-GSD-AP-MW-3	10/5/2021 13:21	Turbidity	0.41	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-4	10/5/2021 14:04	Conductivity	435.02	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:04	DO	0.81	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:04	Depth to Water Detail	7.02	ft
APCO-GSD-AP-MW-4	10/5/2021 14:04	Oxidation Reduction Potention	-47.11	mv
APCO-GSD-AP-MW-4	10/5/2021 14:04	pH	6.53	SU
APCO-GSD-AP-MW-4	10/5/2021 14:04	Temperature	20.75	C
APCO-GSD-AP-MW-4	10/5/2021 14:04	Turbidity	9.21	NTU
APCO-GSD-AP-MW-4	10/5/2021 14:09	Conductivity	436.22	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:09	DO	0.68	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:09	Depth to Water Detail	7.05	ft
APCO-GSD-AP-MW-4	10/5/2021 14:09	Oxidation Reduction Potention	-55.98	mv
APCO-GSD-AP-MW-4	10/5/2021 14:09	pH	6.58	SU
APCO-GSD-AP-MW-4	10/5/2021 14:09	Temperature	20.74	C
APCO-GSD-AP-MW-4	10/5/2021 14:09	Turbidity	5.82	NTU
APCO-GSD-AP-MW-4	10/5/2021 14:14	Conductivity	435.27	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:14	DO	0.1	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:14	Depth to Water Detail	7.06	ft
APCO-GSD-AP-MW-4	10/5/2021 14:14	Oxidation Reduction Potention	-61.76	mv
APCO-GSD-AP-MW-4	10/5/2021 14:14	pH	6.61	SU
APCO-GSD-AP-MW-4	10/5/2021 14:14	Temperature	20.91	C
APCO-GSD-AP-MW-4	10/5/2021 14:14	Turbidity	3.54	NTU
APCO-GSD-AP-MW-4	10/5/2021 14:19	Conductivity	398.32	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:19	DO	1.53	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:19	Depth to Water Detail	7.06	ft
APCO-GSD-AP-MW-4	10/5/2021 14:19	Oxidation Reduction Potention	-65.31	mv
APCO-GSD-AP-MW-4	10/5/2021 14:19	pH	6.62	SU
APCO-GSD-AP-MW-4	10/5/2021 14:19	Temperature	20.98	C
APCO-GSD-AP-MW-4	10/5/2021 14:19	Turbidity	2.21	NTU
APCO-GSD-AP-MW-4	10/5/2021 14:24	Conductivity	432.79	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:24	DO	0.38	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:24	Depth to Water Detail	7.06	ft
APCO-GSD-AP-MW-4	10/5/2021 14:24	Oxidation Reduction Potention	-68.5	mv
APCO-GSD-AP-MW-4	10/5/2021 14:24	pH	6.62	SU
APCO-GSD-AP-MW-4	10/5/2021 14:24	Temperature	20.95	C
APCO-GSD-AP-MW-4	10/5/2021 14:24	Turbidity	2.32	NTU
APCO-GSD-AP-MW-4	10/5/2021 14:29	Conductivity	431.74	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:29	DO	0.37	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:29	Depth to Water Detail	7.06	ft
APCO-GSD-AP-MW-4	10/5/2021 14:29	Oxidation Reduction Potention	-68.02	mv
APCO-GSD-AP-MW-4	10/5/2021 14:29	pH	6.56	SU
APCO-GSD-AP-MW-4	10/5/2021 14:29	Temperature	20.82	C
APCO-GSD-AP-MW-4	10/5/2021 14:29	Turbidity	1.69	NTU
APCO-GSD-AP-MW-4	10/5/2021 14:34	Conductivity	431.22	uS/cm
APCO-GSD-AP-MW-4	10/5/2021 14:34	DO	0.11	mg/L
APCO-GSD-AP-MW-4	10/5/2021 14:34	Depth to Water Detail	7.06	ft
APCO-GSD-AP-MW-4	10/5/2021 14:34	Oxidation Reduction Potention	-70.59	mv
APCO-GSD-AP-MW-4	10/5/2021 14:34	pH	6.58	SU
APCO-GSD-AP-MW-4	10/5/2021 14:34	Temperature	20.73	C
APCO-GSD-AP-MW-4	10/5/2021 14:34	Turbidity	2.08	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-6	10/5/2021 11:50	Conductivity	166.94	uS/cm
APCO-GSD-AP-MW-6	10/5/2021 11:50	DO	0.13	mg/L
APCO-GSD-AP-MW-6	10/5/2021 11:50	Depth to Water Detail	5.16	ft
APCO-GSD-AP-MW-6	10/5/2021 11:50	Oxidation Reduction Potention	101.57	mv
APCO-GSD-AP-MW-6	10/5/2021 11:50	pH	5.74	SU
APCO-GSD-AP-MW-6	10/5/2021 11:50	Temperature	20.14	C
APCO-GSD-AP-MW-6	10/5/2021 11:50	Turbidity	1.28	NTU
APCO-GSD-AP-MW-6	10/5/2021 11:55	Conductivity	167.39	uS/cm
APCO-GSD-AP-MW-6	10/5/2021 11:55	DO	0.12	mg/L
APCO-GSD-AP-MW-6	10/5/2021 11:55	Depth to Water Detail	5.16	ft
APCO-GSD-AP-MW-6	10/5/2021 11:55	Oxidation Reduction Potention	102.37	mv
APCO-GSD-AP-MW-6	10/5/2021 11:55	pH	5.66	SU
APCO-GSD-AP-MW-6	10/5/2021 11:55	Temperature	20.04	C
APCO-GSD-AP-MW-6	10/5/2021 11:55	Turbidity	1.24	NTU
APCO-GSD-AP-MW-6	10/5/2021 12:00	Conductivity	167	uS/cm
APCO-GSD-AP-MW-6	10/5/2021 12:00	DO	0.11	mg/L
APCO-GSD-AP-MW-6	10/5/2021 12:00	Depth to Water Detail	5.16	ft
APCO-GSD-AP-MW-6	10/5/2021 12:00	Oxidation Reduction Potention	101.7	mv
APCO-GSD-AP-MW-6	10/5/2021 12:00	pH	5.64	SU
APCO-GSD-AP-MW-6	10/5/2021 12:00	Temperature	20.04	C
APCO-GSD-AP-MW-6	10/5/2021 12:00	Turbidity	0.65	NTU
APCO-GSD-AP-MW-6	10/5/2021 12:05	Conductivity	166.61	uS/cm
APCO-GSD-AP-MW-6	10/5/2021 12:05	DO	0.11	mg/L
APCO-GSD-AP-MW-6	10/5/2021 12:05	Depth to Water Detail	5.16	ft
APCO-GSD-AP-MW-6	10/5/2021 12:05	Oxidation Reduction Potention	94.86	mv
APCO-GSD-AP-MW-6	10/5/2021 12:05	pH	5.74	SU
APCO-GSD-AP-MW-6	10/5/2021 12:05	Temperature	20.04	C
APCO-GSD-AP-MW-6	10/5/2021 12:05	Turbidity	0.56	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-16	10/6/2021 9:53	Conductivity	289.46	uS/cm
APCO-GSD-AP-MW-16	10/6/2021 9:53	DO	4.05	mg/L
APCO-GSD-AP-MW-16	10/6/2021 9:53	Depth to Water Detail	26.02	ft
APCO-GSD-AP-MW-16	10/6/2021 9:53	Oxidation Reduction Potention	169.41	mv
APCO-GSD-AP-MW-16	10/6/2021 9:53	pH	4.14	SU
APCO-GSD-AP-MW-16	10/6/2021 9:53	Temperature	19.68	C
APCO-GSD-AP-MW-16	10/6/2021 9:53	Turbidity	9.08	NTU
APCO-GSD-AP-MW-16	10/6/2021 9:58	Conductivity	281.31	uS/cm
APCO-GSD-AP-MW-16	10/6/2021 9:58	DO	4.07	mg/L
APCO-GSD-AP-MW-16	10/6/2021 9:58	Depth to Water Detail	26.02	ft
APCO-GSD-AP-MW-16	10/6/2021 9:58	Oxidation Reduction Potention	167.94	mv
APCO-GSD-AP-MW-16	10/6/2021 9:58	pH	4.13	SU
APCO-GSD-AP-MW-16	10/6/2021 9:58	Temperature	19.7	C
APCO-GSD-AP-MW-16	10/6/2021 9:58	Turbidity	4.54	NTU
APCO-GSD-AP-MW-16	10/6/2021 10:03	Conductivity	275.83	uS/cm
APCO-GSD-AP-MW-16	10/6/2021 10:03	DO	4.11	mg/L
APCO-GSD-AP-MW-16	10/6/2021 10:03	Depth to Water Detail	26.02	ft
APCO-GSD-AP-MW-16	10/6/2021 10:03	Oxidation Reduction Potention	166.43	mv
APCO-GSD-AP-MW-16	10/6/2021 10:03	pH	4.14	SU
APCO-GSD-AP-MW-16	10/6/2021 10:03	Temperature	19.58	C
APCO-GSD-AP-MW-16	10/6/2021 10:03	Turbidity	3.63	NTU
APCO-GSD-AP-MW-16	10/6/2021 10:08	Conductivity	272.73	uS/cm
APCO-GSD-AP-MW-16	10/6/2021 10:08	DO	4.12	mg/L
APCO-GSD-AP-MW-16	10/6/2021 10:08	Depth to Water Detail	26.02	ft
APCO-GSD-AP-MW-16	10/6/2021 10:08	Oxidation Reduction Potention	164.32	mv
APCO-GSD-AP-MW-16	10/6/2021 10:08	pH	4.16	SU
APCO-GSD-AP-MW-16	10/6/2021 10:08	Temperature	19.55	C
APCO-GSD-AP-MW-16	10/6/2021 10:08	Turbidity	3.19	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-17	10/6/2021 8:17	Conductivity	322.05	uS/cm
APCO-GSD-AP-MW-17	10/6/2021 8:17	DO	0.82	mg/L
APCO-GSD-AP-MW-17	10/6/2021 8:17	Depth to Water Detail	20.98	ft
APCO-GSD-AP-MW-17	10/6/2021 8:17	Oxidation Reduction Potention	103.34	mv
APCO-GSD-AP-MW-17	10/6/2021 8:17	pH	7.9	SU
APCO-GSD-AP-MW-17	10/6/2021 8:17	Temperature	20.52	C
APCO-GSD-AP-MW-17	10/6/2021 8:17	Turbidity	21.8	NTU
APCO-GSD-AP-MW-17	10/6/2021 8:22	Conductivity	320.08	uS/cm
APCO-GSD-AP-MW-17	10/6/2021 8:22	DO	0.72	mg/L
APCO-GSD-AP-MW-17	10/6/2021 8:22	Depth to Water Detail	21.52	ft
APCO-GSD-AP-MW-17	10/6/2021 8:22	Oxidation Reduction Potention	101.1	mv
APCO-GSD-AP-MW-17	10/6/2021 8:22	pH	7.85	SU
APCO-GSD-AP-MW-17	10/6/2021 8:22	Temperature	20.51	C
APCO-GSD-AP-MW-17	10/6/2021 8:22	Turbidity	17.2	NTU
APCO-GSD-AP-MW-17	10/6/2021 8:27	Conductivity	319.35	uS/cm
APCO-GSD-AP-MW-17	10/6/2021 8:27	DO	0.66	mg/L
APCO-GSD-AP-MW-17	10/6/2021 8:27	Depth to Water Detail	21.96	ft
APCO-GSD-AP-MW-17	10/6/2021 8:27	Oxidation Reduction Potention	93.71	mv
APCO-GSD-AP-MW-17	10/6/2021 8:27	pH	7.89	SU
APCO-GSD-AP-MW-17	10/6/2021 8:27	Temperature	20.49	C
APCO-GSD-AP-MW-17	10/6/2021 8:27	Turbidity	13.5	NTU
APCO-GSD-AP-MW-17	10/6/2021 8:32	Conductivity	318.52	uS/cm
APCO-GSD-AP-MW-17	10/6/2021 8:32	DO	0.66	mg/L
APCO-GSD-AP-MW-17	10/6/2021 8:32	Depth to Water Detail	22.03	ft
APCO-GSD-AP-MW-17	10/6/2021 8:32	Oxidation Reduction Potention	88.51	mv
APCO-GSD-AP-MW-17	10/6/2021 8:32	pH	7.9	SU
APCO-GSD-AP-MW-17	10/6/2021 8:32	Temperature	20.48	C
APCO-GSD-AP-MW-17	10/6/2021 8:32	Turbidity	12	NTU
APCO-GSD-AP-MW-17	10/6/2021 8:37	Conductivity	318.41	uS/cm
APCO-GSD-AP-MW-17	10/6/2021 8:37	DO	0.65	mg/L
APCO-GSD-AP-MW-17	10/6/2021 8:37	Depth to Water Detail	22.14	ft
APCO-GSD-AP-MW-17	10/6/2021 8:37	Oxidation Reduction Potention	82.63	mv
APCO-GSD-AP-MW-17	10/6/2021 8:37	pH	7.91	SU
APCO-GSD-AP-MW-17	10/6/2021 8:37	Temperature	20.48	C
APCO-GSD-AP-MW-17	10/6/2021 8:37	Turbidity	10.31	NTU
APCO-GSD-AP-MW-17	10/6/2021 8:42	Conductivity	317.65	uS/cm
APCO-GSD-AP-MW-17	10/6/2021 8:42	DO	0.64	mg/L
APCO-GSD-AP-MW-17	10/6/2021 8:42	Depth to Water Detail	22.27	ft
APCO-GSD-AP-MW-17	10/6/2021 8:42	Oxidation Reduction Potention	79.35	mv
APCO-GSD-AP-MW-17	10/6/2021 8:42	pH	7.92	SU
APCO-GSD-AP-MW-17	10/6/2021 8:42	Temperature	20.5	C
APCO-GSD-AP-MW-17	10/6/2021 8:42	Turbidity	8.25	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-PZ-2	10/5/2021 10:20	Conductivity	88.61	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:20	DO	0.6	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:20	Depth to Water Detail	8.96	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:20	Oxidation Reduction Potention	110.45	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:20	pH	5.24	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:20	Temperature	21.08	C
APCO-GSD-AP-PZ-2	10/5/2021 10:20	Turbidity	7.4	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:25	Conductivity	89.81	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:25	DO	0.53	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:25	Depth to Water Detail	9.03	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:25	Oxidation Reduction Potention	114.73	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:25	pH	5.27	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:25	Temperature	21.04	C
APCO-GSD-AP-PZ-2	10/5/2021 10:25	Turbidity	5.79	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:30	Conductivity	90.87	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:30	DO	0.49	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:30	Depth to Water Detail	9.11	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:30	Oxidation Reduction Potention	123.59	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:30	pH	5.13	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:30	Temperature	21	C
APCO-GSD-AP-PZ-2	10/5/2021 10:30	Turbidity	6.91	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:35	Conductivity	98.58	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:35	DO	0.48	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:35	Depth to Water Detail	9.11	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:35	Oxidation Reduction Potention	124.04	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:35	pH	5.17	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:35	Temperature	20.97	C
APCO-GSD-AP-PZ-2	10/5/2021 10:35	Turbidity	7.15	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:40	Conductivity	140.99	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:40	DO	0.49	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:40	Depth to Water Detail	9.11	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:40	Oxidation Reduction Potention	112.61	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:40	pH	5.5	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:40	Temperature	21.02	C
APCO-GSD-AP-PZ-2	10/5/2021 10:40	Turbidity	6.98	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:45	Conductivity	161.33	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:45	DO	0.49	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:45	Depth to Water Detail	9.11	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:45	Oxidation Reduction Potention	107.55	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:45	pH	5.66	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:45	Temperature	21.05	C
APCO-GSD-AP-PZ-2	10/5/2021 10:45	Turbidity	6.3	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:50	Conductivity	165.64	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:50	DO	0.53	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:50	Depth to Water Detail	9.11	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:50	Oxidation Reduction Potention	105.05	mv
APCO-GSD-AP-PZ-2	10/5/2021 10:50	pH	5.7	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:50	Temperature	21.08	C
APCO-GSD-AP-PZ-2	10/5/2021 10:50	Turbidity	4.96	NTU
APCO-GSD-AP-PZ-2	10/5/2021 10:55	Conductivity	165.56	uS/cm
APCO-GSD-AP-PZ-2	10/5/2021 10:55	DO	0.53	mg/L
APCO-GSD-AP-PZ-2	10/5/2021 10:55	Depth to Water Detail	9.11	ft
APCO-GSD-AP-PZ-2	10/5/2021 10:55	Oxidation Reduction Potention	104.67	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-PZ-2	10/5/2021 10:55	pH	5.72	SU
APCO-GSD-AP-PZ-2	10/5/2021 10:55	Temperature	21.06	C
APCO-GSD-AP-PZ-2	10/5/2021 10:55	Turbidity	4.86	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-1	10/5/2021 14:00	Conductivity	1210.63	uS/cm
APCO-GSD-AP-MW-1	10/5/2021 14:00	DO	0.23	mg/L
APCO-GSD-AP-MW-1	10/5/2021 14:00	Depth to Water Detail	12.66	ft
APCO-GSD-AP-MW-1	10/5/2021 14:00	Oxidation Reduction Potention	110.69	mv
APCO-GSD-AP-MW-1	10/5/2021 14:00	pH	5.75	SU
APCO-GSD-AP-MW-1	10/5/2021 14:00	Temperature	18.55	C
APCO-GSD-AP-MW-1	10/5/2021 14:00	Turbidity	4.89	NTU
APCO-GSD-AP-MW-1	10/5/2021 14:05	Conductivity	1205.99	uS/cm
APCO-GSD-AP-MW-1	10/5/2021 14:05	DO	0.19	mg/L
APCO-GSD-AP-MW-1	10/5/2021 14:05	Depth to Water Detail	12.66	ft
APCO-GSD-AP-MW-1	10/5/2021 14:05	Oxidation Reduction Potention	108.83	mv
APCO-GSD-AP-MW-1	10/5/2021 14:05	pH	5.76	SU
APCO-GSD-AP-MW-1	10/5/2021 14:05	Temperature	18.57	C
APCO-GSD-AP-MW-1	10/5/2021 14:05	Turbidity	3.06	NTU
APCO-GSD-AP-MW-1	10/5/2021 14:10	Conductivity	1202.77	uS/cm
APCO-GSD-AP-MW-1	10/5/2021 14:10	DO	0.18	mg/L
APCO-GSD-AP-MW-1	10/5/2021 14:10	Depth to Water Detail	12.66	ft
APCO-GSD-AP-MW-1	10/5/2021 14:10	Oxidation Reduction Potention	106.88	mv
APCO-GSD-AP-MW-1	10/5/2021 14:10	pH	5.72	SU
APCO-GSD-AP-MW-1	10/5/2021 14:10	Temperature	18.62	C
APCO-GSD-AP-MW-1	10/5/2021 14:10	Turbidity	2.3	NTU
APCO-GSD-AP-MW-1	10/5/2021 14:15	Conductivity	1200.42	uS/cm
APCO-GSD-AP-MW-1	10/5/2021 14:15	DO	0.16	mg/L
APCO-GSD-AP-MW-1	10/5/2021 14:15	Depth to Water Detail	12.66	ft
APCO-GSD-AP-MW-1	10/5/2021 14:15	Oxidation Reduction Potention	104.55	mv
APCO-GSD-AP-MW-1	10/5/2021 14:15	pH	5.79	SU
APCO-GSD-AP-MW-1	10/5/2021 14:15	Temperature	18.8	C
APCO-GSD-AP-MW-1	10/5/2021 14:15	Turbidity	2.76	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	Conductivity	522.29	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	DO	0.29	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	Depth to Water Detail	16.07	ft
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	Oxidation Reduction Potention	-150.49	mv
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	pH	8.08	SU
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	Temperature	19.49	C
APCO-GSD-AP-MW-2VA	10/6/2021 8:57	Turbidity	1.12	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	Conductivity	523.66	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	DO	0.26	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	Depth to Water Detail	18.24	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	Oxidation Reduction Potention	-156.33	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	pH	8.14	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	Temperature	19.47	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:02	Turbidity	1.04	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	Conductivity	522.44	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	DO	0.25	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	Depth to Water Detail	20.33	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	Oxidation Reduction Potention	-159.72	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	pH	8.18	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	Temperature	19.5	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:07	Turbidity	0.92	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	Conductivity	524.13	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	DO	0.66	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	Depth to Water Detail	20.78	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	Oxidation Reduction Potention	-152.59	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	pH	8.21	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	Temperature	20.91	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:12	Turbidity	0.84	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	Conductivity	522.7	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	DO	0.8	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	Depth to Water Detail	21.04	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	Oxidation Reduction Potention	-149.55	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	pH	8.23	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	Temperature	20.96	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:17	Turbidity	1.23	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	Conductivity	520.95	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	DO	0.83	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	Depth to Water Detail	21.23	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	Oxidation Reduction Potention	-150.64	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	pH	8.26	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	Temperature	21.1	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:22	Turbidity	1.18	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	Conductivity	518.65	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	DO	0.82	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	Depth to Water Detail	21.64	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	Oxidation Reduction Potention	-152.34	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	pH	8.34	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	Temperature	21.55	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:27	Turbidity	0.98	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	Conductivity	515.35	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	DO	0.83	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	Depth to Water Detail	21.81	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	Oxidation Reduction Potention	-153.68	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	pH	8.36	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	Temperature	21.73	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:32	Turbidity	0.62	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	Conductivity	510.02	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	DO	0.84	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	Depth to Water Detail	22.08	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	Oxidation Reduction Potention	-153.65	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	pH	8.35	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	Temperature	21.62	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:37	Turbidity	0.61	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	Conductivity	503.68	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	DO	0.84	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	Depth to Water Detail	22.33	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	Oxidation Reduction Potention	-154.25	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	pH	8.35	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	Temperature	21.61	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:42	Turbidity	0.69	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	Conductivity	500.82	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	DO	0.81	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	Depth to Water Detail	22.58	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	Oxidation Reduction Potention	-155.72	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	pH	8.36	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	Temperature	21.64	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:47	Turbidity	0.63	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	Conductivity	496.76	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	DO	0.8	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	Depth to Water Detail	22.81	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	Oxidation Reduction Potention	-156.95	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	pH	8.38	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	Temperature	22.34	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:52	Turbidity	0.74	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	Conductivity	494.74	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	DO	0.81	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	Depth to Water Detail	23.04	ft
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	Oxidation Reduction Potention	-157.45	mv
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	pH	8.4	SU
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	Temperature	22.71	C
APCO-GSD-AP-MW-2VA	10/6/2021 9:57	Turbidity	0.71	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	Conductivity	490.45	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	DO	0.81	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	Depth to Water Detail	23.22	ft
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	Oxidation Reduction Potention	-156.68	mv
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	pH	8.37	SU
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	Temperature	22.74	C
APCO-GSD-AP-MW-2VA	10/6/2021 10:02	Turbidity	0.61	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	Conductivity	485.36	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	DO	0.82	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	Depth to Water Detail	23.4	ft
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	Oxidation Reduction Potention	-157.6	mv
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	pH	8.37	SU
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	Temperature	21.81	C
APCO-GSD-AP-MW-2VA	10/6/2021 10:07	Turbidity	0.64	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	Conductivity	482.23	uS/cm

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	DO	0.82	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	Depth to Water Detail	23.58	ft
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	Oxidation Reduction Potention	-157.78	mv
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	pH	8.43	SU
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	Temperature	22.71	C
APCO-GSD-AP-MW-2VA	10/6/2021 10:12	Turbidity	0.52	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	Conductivity	476.49	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	DO	0.82	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	Depth to Water Detail	23.72	ft
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	Oxidation Reduction Potention	-159.56	mv
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	pH	8.4	SU
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	Temperature	22.6	C
APCO-GSD-AP-MW-2VA	10/6/2021 10:17	Turbidity	0.56	NTU
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	Conductivity	470.65	uS/cm
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	DO	0.82	mg/L
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	Depth to Water Detail	23.86	ft
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	Oxidation Reduction Potention	-157.17	mv
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	pH	8.36	SU
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	Temperature	22.4	C
APCO-GSD-AP-MW-2VA	10/6/2021 10:22	Turbidity	0.62	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-5	10/5/2021 11:35	Conductivity	274.31	uS/cm
APCO-GSD-AP-MW-5	10/5/2021 11:35	DO	0.36	mg/L
APCO-GSD-AP-MW-5	10/5/2021 11:35	Depth to Water Detail	5.28	ft
APCO-GSD-AP-MW-5	10/5/2021 11:35	Oxidation Reduction Potention	45	mv
APCO-GSD-AP-MW-5	10/5/2021 11:35	pH	6.34	SU
APCO-GSD-AP-MW-5	10/5/2021 11:35	Temperature	20.93	C
APCO-GSD-AP-MW-5	10/5/2021 11:35	Turbidity	5.52	NTU
APCO-GSD-AP-MW-5	10/5/2021 11:40	Conductivity	266.49	uS/cm
APCO-GSD-AP-MW-5	10/5/2021 11:40	DO	0.3	mg/L
APCO-GSD-AP-MW-5	10/5/2021 11:40	Depth to Water Detail	5.28	ft
APCO-GSD-AP-MW-5	10/5/2021 11:40	Oxidation Reduction Potention	64.8	mv
APCO-GSD-AP-MW-5	10/5/2021 11:40	pH	6.29	SU
APCO-GSD-AP-MW-5	10/5/2021 11:40	Temperature	21.02	C
APCO-GSD-AP-MW-5	10/5/2021 11:40	Turbidity	3.38	NTU
APCO-GSD-AP-MW-5	10/5/2021 11:45	Conductivity	266.24	uS/cm
APCO-GSD-AP-MW-5	10/5/2021 11:45	DO	0.24	mg/L
APCO-GSD-AP-MW-5	10/5/2021 11:45	Depth to Water Detail	5.28	ft
APCO-GSD-AP-MW-5	10/5/2021 11:45	Oxidation Reduction Potention	68.78	mv
APCO-GSD-AP-MW-5	10/5/2021 11:45	pH	6.27	SU
APCO-GSD-AP-MW-5	10/5/2021 11:45	Temperature	21.07	C
APCO-GSD-AP-MW-5	10/5/2021 11:45	Turbidity	2.93	NTU
APCO-GSD-AP-MW-5	10/5/2021 11:50	Conductivity	267.75	uS/cm
APCO-GSD-AP-MW-5	10/5/2021 11:50	DO	0.22	mg/L
APCO-GSD-AP-MW-5	10/5/2021 11:50	Depth to Water Detail	5.28	ft
APCO-GSD-AP-MW-5	10/5/2021 11:50	Oxidation Reduction Potention	69.13	mv
APCO-GSD-AP-MW-5	10/5/2021 11:50	pH	6.24	SU
APCO-GSD-AP-MW-5	10/5/2021 11:50	Temperature	21.08	C
APCO-GSD-AP-MW-5	10/5/2021 11:50	Turbidity	2.81	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-7	10/5/2021 14:53	Conductivity	174.57	uS/cm
APCO-GSD-AP-MW-7	10/5/2021 14:53	DO	0.3	mg/L
APCO-GSD-AP-MW-7	10/5/2021 14:53	Depth to Water Detail	11.66	ft
APCO-GSD-AP-MW-7	10/5/2021 14:53	Oxidation Reduction Potention	113.13	mv
APCO-GSD-AP-MW-7	10/5/2021 14:53	pH	6.02	SU
APCO-GSD-AP-MW-7	10/5/2021 14:53	Temperature	19.15	C
APCO-GSD-AP-MW-7	10/5/2021 14:53	Turbidity	1.33	NTU
APCO-GSD-AP-MW-7	10/5/2021 14:58	Conductivity	168.43	uS/cm
APCO-GSD-AP-MW-7	10/5/2021 14:58	DO	0.26	mg/L
APCO-GSD-AP-MW-7	10/5/2021 14:58	Depth to Water Detail	11.66	ft
APCO-GSD-AP-MW-7	10/5/2021 14:58	Oxidation Reduction Potention	119.06	mv
APCO-GSD-AP-MW-7	10/5/2021 14:58	pH	6.02	SU
APCO-GSD-AP-MW-7	10/5/2021 14:58	Temperature	19.15	C
APCO-GSD-AP-MW-7	10/5/2021 14:58	Turbidity	1.09	NTU
APCO-GSD-AP-MW-7	10/5/2021 15:03	Conductivity	164.36	uS/cm
APCO-GSD-AP-MW-7	10/5/2021 15:03	DO	0.24	mg/L
APCO-GSD-AP-MW-7	10/5/2021 15:03	Depth to Water Detail	11.66	ft
APCO-GSD-AP-MW-7	10/5/2021 15:03	Oxidation Reduction Potention	120.15	mv
APCO-GSD-AP-MW-7	10/5/2021 15:03	pH	6.02	SU
APCO-GSD-AP-MW-7	10/5/2021 15:03	Temperature	19.08	C
APCO-GSD-AP-MW-7	10/5/2021 15:03	Turbidity	1.05	NTU
APCO-GSD-AP-MW-7	10/5/2021 15:08	Conductivity	162.09	uS/cm
APCO-GSD-AP-MW-7	10/5/2021 15:08	DO	0.22	mg/L
APCO-GSD-AP-MW-7	10/5/2021 15:08	Depth to Water Detail	11.66	ft
APCO-GSD-AP-MW-7	10/5/2021 15:08	Oxidation Reduction Potention	120.03	mv
APCO-GSD-AP-MW-7	10/5/2021 15:08	pH	6.06	SU
APCO-GSD-AP-MW-7	10/5/2021 15:08	Temperature	19.14	C
APCO-GSD-AP-MW-7	10/5/2021 15:08	Turbidity	0.99	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-12	10/5/2021 12:35	Conductivity	211.47	uS/cm
APCO-GSD-AP-MW-12	10/5/2021 12:35	DO	0.25	mg/L
APCO-GSD-AP-MW-12	10/5/2021 12:35	Depth to Water Detail	10.88	ft
APCO-GSD-AP-MW-12	10/5/2021 12:35	Oxidation Reduction Potention	150.09	mv
APCO-GSD-AP-MW-12	10/5/2021 12:35	pH	5.19	SU
APCO-GSD-AP-MW-12	10/5/2021 12:35	Temperature	18.63	C
APCO-GSD-AP-MW-12	10/5/2021 12:35	Turbidity	0.65	NTU
APCO-GSD-AP-MW-12	10/5/2021 12:40	Conductivity	482.94	uS/cm
APCO-GSD-AP-MW-12	10/5/2021 12:40	DO	0.18	mg/L
APCO-GSD-AP-MW-12	10/5/2021 12:40	Depth to Water Detail	10.88	ft
APCO-GSD-AP-MW-12	10/5/2021 12:40	Oxidation Reduction Potention	154.38	mv
APCO-GSD-AP-MW-12	10/5/2021 12:40	pH	5.19	SU
APCO-GSD-AP-MW-12	10/5/2021 12:40	Temperature	18.48	C
APCO-GSD-AP-MW-12	10/5/2021 12:40	Turbidity	0.55	NTU
APCO-GSD-AP-MW-12	10/5/2021 12:45	Conductivity	508.62	uS/cm
APCO-GSD-AP-MW-12	10/5/2021 12:45	DO	0.16	mg/L
APCO-GSD-AP-MW-12	10/5/2021 12:45	Depth to Water Detail	10.88	ft
APCO-GSD-AP-MW-12	10/5/2021 12:45	Oxidation Reduction Potention	163.63	mv
APCO-GSD-AP-MW-12	10/5/2021 12:45	pH	5.15	SU
APCO-GSD-AP-MW-12	10/5/2021 12:45	Temperature	18.46	C
APCO-GSD-AP-MW-12	10/5/2021 12:45	Turbidity	0.47	NTU
APCO-GSD-AP-MW-12	10/5/2021 12:50	Conductivity	509.13	uS/cm
APCO-GSD-AP-MW-12	10/5/2021 12:50	DO	0.15	mg/L
APCO-GSD-AP-MW-12	10/5/2021 12:50	Depth to Water Detail	10.88	ft
APCO-GSD-AP-MW-12	10/5/2021 12:50	Oxidation Reduction Potention	165.65	mv
APCO-GSD-AP-MW-12	10/5/2021 12:50	pH	5.16	SU
APCO-GSD-AP-MW-12	10/5/2021 12:50	Temperature	18.45	C
APCO-GSD-AP-MW-12	10/5/2021 12:50	Turbidity	0.41	NTU
APCO-GSD-AP-MW-12	10/5/2021 12:55	Conductivity	510.48	uS/cm
APCO-GSD-AP-MW-12	10/5/2021 12:55	DO	0.14	mg/L
APCO-GSD-AP-MW-12	10/5/2021 12:55	Depth to Water Detail	10.88	ft
APCO-GSD-AP-MW-12	10/5/2021 12:55	Oxidation Reduction Potention	164.29	mv
APCO-GSD-AP-MW-12	10/5/2021 12:55	pH	5.19	SU
APCO-GSD-AP-MW-12	10/5/2021 12:55	Temperature	18.44	C
APCO-GSD-AP-MW-12	10/5/2021 12:55	Turbidity	0.39	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	Conductivity	1572.76	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	DO	0.21	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	Depth to Water Detail	10.61	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	Oxidation Reduction Potention	-98.88	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	pH	8.19	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	Temperature	19.06	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:23	Turbidity	31	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	Conductivity	1559.46	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	DO	0.16	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	Depth to Water Detail	12.36	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	Oxidation Reduction Potention	-126.52	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	pH	8.3	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	Temperature	18.83	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:28	Turbidity	23.9	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	Conductivity	1558.24	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	DO	0.15	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	Depth to Water Detail	13.38	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	Oxidation Reduction Potention	-138.54	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	pH	8.32	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	Temperature	18.69	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:33	Turbidity	19.6	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	Conductivity	1517.66	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	DO	0.13	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	Depth to Water Detail	14.13	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	Oxidation Reduction Potention	-143.93	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	pH	8.3	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	Temperature	18.72	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:38	Turbidity	15.9	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	Conductivity	1465.41	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	DO	0.13	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	Depth to Water Detail	14.96	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	Oxidation Reduction Potention	-147.29	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	pH	8.3	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	Temperature	18.71	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:43	Turbidity	14.6	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	Conductivity	1535.45	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	DO	0.12	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	Depth to Water Detail	15.62	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	Oxidation Reduction Potention	-150.41	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	pH	8.4	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	Temperature	18.66	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:48	Turbidity	13.2	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	Conductivity	1516.55	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	DO	0.12	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	Depth to Water Detail	16.3	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	Oxidation Reduction Potention	-151.84	mv
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	pH	8.42	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	Temperature	18.66	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:53	Turbidity	12.4	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	Conductivity	1415.78	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	DO	0.16	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	Depth to Water Detail	16.13	ft
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	Oxidation Reduction Potention	-151.97	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	pH	8.46	SU
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	Temperature	19.21	C
APCO-GSD-AP-MW-21VC	10/6/2021 11:58	Turbidity	15.9	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	Conductivity	1479.28	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	DO	0.18	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	Depth to Water Detail	16	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	Oxidation Reduction Potention	-152.75	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	pH	8.47	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	Temperature	19.2	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:03	Turbidity	13.3	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	Conductivity	1427.23	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	DO	0.17	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	Depth to Water Detail	15.94	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	Oxidation Reduction Potention	-153.23	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	pH	8.45	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	Temperature	19.08	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:08	Turbidity	11.7	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	Conductivity	1455.36	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	DO	0.18	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	Depth to Water Detail	15.92	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	Oxidation Reduction Potention	-153.38	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	pH	8.5	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	Temperature	19.14	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:13	Turbidity	11.6	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	Conductivity	1404.59	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	DO	0.17	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	Depth to Water Detail	15.96	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	Oxidation Reduction Potention	-153.8	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	pH	8.46	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	Temperature	19.08	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:18	Turbidity	11.2	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	Conductivity	1367.86	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	DO	0.17	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	Depth to Water Detail	16.1	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	Oxidation Reduction Potention	-154.33	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	pH	8.49	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	Temperature	19.08	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:23	Turbidity	11.1	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	Conductivity	1338.86	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	DO	0.17	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	Depth to Water Detail	16.23	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	Oxidation Reduction Potention	-154.63	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	pH	8.46	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	Temperature	19.09	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:28	Turbidity	10.32	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	Conductivity	1491.09	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	DO	0.16	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	Depth to Water Detail	16.31	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	Oxidation Reduction Potention	-154.94	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	pH	8.51	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	Temperature	19.16	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:33	Turbidity	10.85	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	Conductivity	1429.16	uS/cm

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	DO	0.18	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	Depth to Water Detail	16.39	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	Oxidation Reduction Potention	-155.01	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	pH	8.52	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	Temperature	19.07	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:38	Turbidity	10.08	NTU
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	Conductivity	1478.62	uS/cm
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	DO	0.16	mg/L
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	Depth to Water Detail	16.43	ft
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	Oxidation Reduction Potention	-155.17	mv
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	pH	8.53	SU
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	Temperature	19.22	C
APCO-GSD-AP-MW-21VC	10/6/2021 12:43	Turbidity	9.3	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-PZ-1	10/5/2021 10:32	Conductivity	82.64	uS/cm
APCO-GSD-AP-PZ-1	10/5/2021 10:32	DO	0.85	mg/L
APCO-GSD-AP-PZ-1	10/5/2021 10:32	Depth to Water Detail	8.73	ft
APCO-GSD-AP-PZ-1	10/5/2021 10:32	Oxidation Reduction Potention	103.3	mv
APCO-GSD-AP-PZ-1	10/5/2021 10:32	pH	5.8	SU
APCO-GSD-AP-PZ-1	10/5/2021 10:32	Temperature	19.84	C
APCO-GSD-AP-PZ-1	10/5/2021 10:32	Turbidity	1.31	NTU
APCO-GSD-AP-PZ-1	10/5/2021 10:37	Conductivity	119.42	uS/cm
APCO-GSD-AP-PZ-1	10/5/2021 10:37	DO	0.72	mg/L
APCO-GSD-AP-PZ-1	10/5/2021 10:37	Depth to Water Detail	8.73	ft
APCO-GSD-AP-PZ-1	10/5/2021 10:37	Oxidation Reduction Potention	109.07	mv
APCO-GSD-AP-PZ-1	10/5/2021 10:37	pH	6.04	SU
APCO-GSD-AP-PZ-1	10/5/2021 10:37	Temperature	19.93	C
APCO-GSD-AP-PZ-1	10/5/2021 10:37	Turbidity	1.38	NTU
APCO-GSD-AP-PZ-1	10/5/2021 10:42	Conductivity	157.59	uS/cm
APCO-GSD-AP-PZ-1	10/5/2021 10:42	DO	0.64	mg/L
APCO-GSD-AP-PZ-1	10/5/2021 10:42	Depth to Water Detail	8.73	ft
APCO-GSD-AP-PZ-1	10/5/2021 10:42	Oxidation Reduction Potention	110.19	mv
APCO-GSD-AP-PZ-1	10/5/2021 10:42	pH	6.23	SU
APCO-GSD-AP-PZ-1	10/5/2021 10:42	Temperature	19.86	C
APCO-GSD-AP-PZ-1	10/5/2021 10:42	Turbidity	1.16	NTU
APCO-GSD-AP-PZ-1	10/5/2021 10:47	Conductivity	167.58	uS/cm
APCO-GSD-AP-PZ-1	10/5/2021 10:47	DO	0.63	mg/L
APCO-GSD-AP-PZ-1	10/5/2021 10:47	Depth to Water Detail	8.73	ft
APCO-GSD-AP-PZ-1	10/5/2021 10:47	Oxidation Reduction Potention	105.94	mv
APCO-GSD-AP-PZ-1	10/5/2021 10:47	pH	6.36	SU
APCO-GSD-AP-PZ-1	10/5/2021 10:47	Temperature	19.8	C
APCO-GSD-AP-PZ-1	10/5/2021 10:47	Turbidity	1.04	NTU
APCO-GSD-AP-PZ-1	10/5/2021 10:52	Conductivity	171.58	uS/cm
APCO-GSD-AP-PZ-1	10/5/2021 10:52	DO	0.64	mg/L
APCO-GSD-AP-PZ-1	10/5/2021 10:52	Depth to Water Detail	8.73	ft
APCO-GSD-AP-PZ-1	10/5/2021 10:52	Oxidation Reduction Potention	106.16	mv
APCO-GSD-AP-PZ-1	10/5/2021 10:52	pH	6.41	SU
APCO-GSD-AP-PZ-1	10/5/2021 10:52	Temperature	19.8	C
APCO-GSD-AP-PZ-1	10/5/2021 10:52	Turbidity	0.9	NTU
APCO-GSD-AP-PZ-1	10/5/2021 10:57	Conductivity	168.13	uS/cm
APCO-GSD-AP-PZ-1	10/5/2021 10:57	DO	0.68	mg/L
APCO-GSD-AP-PZ-1	10/5/2021 10:57	Depth to Water Detail	8.73	ft
APCO-GSD-AP-PZ-1	10/5/2021 10:57	Oxidation Reduction Potention	101.9	mv
APCO-GSD-AP-PZ-1	10/5/2021 10:57	pH	6.46	SU
APCO-GSD-AP-PZ-1	10/5/2021 10:57	Temperature	19.85	C
APCO-GSD-AP-PZ-1	10/5/2021 10:57	Turbidity	0.96	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-4V	10/11/2021 11:54	Conductivity	445.8	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 11:54	DO	0.17	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 11:54	Depth to Water Detail	11.93	ft
APCO-GSD-AP-MW-4V	10/11/2021 11:54	Oxidation Reduction Potention	70.71	mv
APCO-GSD-AP-MW-4V	10/11/2021 11:54	pH	7.74	SU
APCO-GSD-AP-MW-4V	10/11/2021 11:54	Temperature	20.13	C
APCO-GSD-AP-MW-4V	10/11/2021 11:54	Turbidity	2.11	NTU
APCO-GSD-AP-MW-4V	10/11/2021 11:59	Conductivity	445.51	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 11:59	DO	0.16	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 11:59	Depth to Water Detail	13.56	ft
APCO-GSD-AP-MW-4V	10/11/2021 11:59	Oxidation Reduction Potention	46.49	mv
APCO-GSD-AP-MW-4V	10/11/2021 11:59	pH	7.78	SU
APCO-GSD-AP-MW-4V	10/11/2021 11:59	Temperature	19.87	C
APCO-GSD-AP-MW-4V	10/11/2021 11:59	Turbidity	2.24	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:04	Conductivity	444.34	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:04	DO	0.16	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:04	Depth to Water Detail	16.02	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:04	Oxidation Reduction Potention	27.57	mv
APCO-GSD-AP-MW-4V	10/11/2021 12:04	pH	7.78	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:04	Temperature	19.99	C
APCO-GSD-AP-MW-4V	10/11/2021 12:04	Turbidity	1.4	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:09	Conductivity	444.2	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:09	DO	0.16	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:09	Depth to Water Detail	17.04	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:09	Oxidation Reduction Potention	9.39	mv
APCO-GSD-AP-MW-4V	10/11/2021 12:09	pH	7.79	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:09	Temperature	19.64	C
APCO-GSD-AP-MW-4V	10/11/2021 12:09	Turbidity	1.15	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:14	Conductivity	442.7	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:14	DO	0.16	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:14	Depth to Water Detail	17.84	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:14	Oxidation Reduction Potention	-7.48	mv
APCO-GSD-AP-MW-4V	10/11/2021 12:14	pH	7.82	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:14	Temperature	19.56	C
APCO-GSD-AP-MW-4V	10/11/2021 12:14	Turbidity	1.37	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:19	Conductivity	442.5	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:19	DO	0.16	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:19	Depth to Water Detail	18.71	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:19	Oxidation Reduction Potention	-21.33	mv
APCO-GSD-AP-MW-4V	10/11/2021 12:19	pH	7.84	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:19	Temperature	19.67	C
APCO-GSD-AP-MW-4V	10/11/2021 12:19	Turbidity	1.03	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:24	Conductivity	441.58	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:24	DO	0.16	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:24	Depth to Water Detail	19.21	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:24	Oxidation Reduction Potention	-33.56	mv
APCO-GSD-AP-MW-4V	10/11/2021 12:24	pH	7.86	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:24	Temperature	19.78	C
APCO-GSD-AP-MW-4V	10/11/2021 12:24	Turbidity	1.17	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:29	Conductivity	440.21	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:29	DO	0.17	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:29	Depth to Water Detail	19.39	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:29	Oxidation Reduction Potention	-43.97	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-4V	10/11/2021 12:29	pH	7.87	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:29	Temperature	19.56	C
APCO-GSD-AP-MW-4V	10/11/2021 12:29	Turbidity	1.3	NTU
APCO-GSD-AP-MW-4V	10/11/2021 12:34	Conductivity	439.07	uS/cm
APCO-GSD-AP-MW-4V	10/11/2021 12:34	DO	0.17	mg/L
APCO-GSD-AP-MW-4V	10/11/2021 12:34	Depth to Water Detail	19.45	ft
APCO-GSD-AP-MW-4V	10/11/2021 12:34	Oxidation Reduction Potention	-49.91	mv
APCO-GSD-AP-MW-4V	10/11/2021 12:34	pH	7.82	SU
APCO-GSD-AP-MW-4V	10/11/2021 12:34	Temperature	19.61	C
APCO-GSD-AP-MW-4V	10/11/2021 12:34	Turbidity	1.17	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-20H	10/11/2021 13:10	Conductivity	683.36	uS/cm
APCO-GSD-AP-MW-20H	10/11/2021 13:10	DO	0.26	mg/L
APCO-GSD-AP-MW-20H	10/11/2021 13:10	Depth to Water Detail	3.15	ft
APCO-GSD-AP-MW-20H	10/11/2021 13:10	Oxidation Reduction Potention	4.13	mv
APCO-GSD-AP-MW-20H	10/11/2021 13:10	pH	6.27	SU
APCO-GSD-AP-MW-20H	10/11/2021 13:10	Temperature	19.58	C
APCO-GSD-AP-MW-20H	10/11/2021 13:10	Turbidity	47.5	NTU
APCO-GSD-AP-MW-20H	10/11/2021 13:15	Conductivity	677.32	uS/cm
APCO-GSD-AP-MW-20H	10/11/2021 13:15	DO	0.23	mg/L
APCO-GSD-AP-MW-20H	10/11/2021 13:15	Depth to Water Detail	3.15	ft
APCO-GSD-AP-MW-20H	10/11/2021 13:15	Oxidation Reduction Potention	8.12	mv
APCO-GSD-AP-MW-20H	10/11/2021 13:15	pH	6.29	SU
APCO-GSD-AP-MW-20H	10/11/2021 13:15	Temperature	19.61	C
APCO-GSD-AP-MW-20H	10/11/2021 13:15	Turbidity	16.7	NTU
APCO-GSD-AP-MW-20H	10/11/2021 13:20	Conductivity	674.28	uS/cm
APCO-GSD-AP-MW-20H	10/11/2021 13:20	DO	0.23	mg/L
APCO-GSD-AP-MW-20H	10/11/2021 13:20	Depth to Water Detail	3.15	ft
APCO-GSD-AP-MW-20H	10/11/2021 13:20	Oxidation Reduction Potention	9.18	mv
APCO-GSD-AP-MW-20H	10/11/2021 13:20	pH	6.32	SU
APCO-GSD-AP-MW-20H	10/11/2021 13:20	Temperature	19.7	C
APCO-GSD-AP-MW-20H	10/11/2021 13:20	Turbidity	13.3	NTU
APCO-GSD-AP-MW-20H	10/11/2021 13:25	Conductivity	672.64	uS/cm
APCO-GSD-AP-MW-20H	10/11/2021 13:25	DO	0.23	mg/L
APCO-GSD-AP-MW-20H	10/11/2021 13:25	Depth to Water Detail	3.15	ft
APCO-GSD-AP-MW-20H	10/11/2021 13:25	Oxidation Reduction Potention	8.59	mv
APCO-GSD-AP-MW-20H	10/11/2021 13:25	pH	6.36	SU
APCO-GSD-AP-MW-20H	10/11/2021 13:25	Temperature	19.78	C
APCO-GSD-AP-MW-20H	10/11/2021 13:25	Turbidity	8.97	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-10	10/11/2021 14:12	Conductivity	372.52	uS/cm
APCO-GSD-AP-MW-10	10/11/2021 14:12	DO	1.02	mg/L
APCO-GSD-AP-MW-10	10/11/2021 14:12	Depth to Water Detail	21.83	ft
APCO-GSD-AP-MW-10	10/11/2021 14:12	Oxidation Reduction Potention	-30.94	mv
APCO-GSD-AP-MW-10	10/11/2021 14:12	pH	6.57	SU
APCO-GSD-AP-MW-10	10/11/2021 14:12	Temperature	20.02	C
APCO-GSD-AP-MW-10	10/11/2021 14:12	Turbidity	12.58	NTU
APCO-GSD-AP-MW-10	10/11/2021 14:17	Conductivity	372.53	uS/cm
APCO-GSD-AP-MW-10	10/11/2021 14:17	DO	0.87	mg/L
APCO-GSD-AP-MW-10	10/11/2021 14:17	Depth to Water Detail	21.89	ft
APCO-GSD-AP-MW-10	10/11/2021 14:17	Oxidation Reduction Potention	-40.47	mv
APCO-GSD-AP-MW-10	10/11/2021 14:17	pH	6.62	SU
APCO-GSD-AP-MW-10	10/11/2021 14:17	Temperature	20.28	C
APCO-GSD-AP-MW-10	10/11/2021 14:17	Turbidity	7.74	NTU
APCO-GSD-AP-MW-10	10/11/2021 14:22	Conductivity	371.68	uS/cm
APCO-GSD-AP-MW-10	10/11/2021 14:22	DO	0.75	mg/L
APCO-GSD-AP-MW-10	10/11/2021 14:22	Depth to Water Detail	22.94	ft
APCO-GSD-AP-MW-10	10/11/2021 14:22	Oxidation Reduction Potention	-46.9	mv
APCO-GSD-AP-MW-10	10/11/2021 14:22	pH	6.67	SU
APCO-GSD-AP-MW-10	10/11/2021 14:22	Temperature	20.16	C
APCO-GSD-AP-MW-10	10/11/2021 14:22	Turbidity	5.31	NTU
APCO-GSD-AP-MW-10	10/11/2021 14:27	Conductivity	371.31	uS/cm
APCO-GSD-AP-MW-10	10/11/2021 14:27	DO	0.63	mg/L
APCO-GSD-AP-MW-10	10/11/2021 14:27	Depth to Water Detail	22.98	ft
APCO-GSD-AP-MW-10	10/11/2021 14:27	Oxidation Reduction Potention	-51.41	mv
APCO-GSD-AP-MW-10	10/11/2021 14:27	pH	6.7	SU
APCO-GSD-AP-MW-10	10/11/2021 14:27	Temperature	20.07	C
APCO-GSD-AP-MW-10	10/11/2021 14:27	Turbidity	3.82	NTU
APCO-GSD-AP-MW-10	10/11/2021 14:32	Conductivity	371.22	uS/cm
APCO-GSD-AP-MW-10	10/11/2021 14:32	DO	0.52	mg/L
APCO-GSD-AP-MW-10	10/11/2021 14:32	Depth to Water Detail	22.98	ft
APCO-GSD-AP-MW-10	10/11/2021 14:32	Oxidation Reduction Potention	-54.5	mv
APCO-GSD-AP-MW-10	10/11/2021 14:32	pH	6.72	SU
APCO-GSD-AP-MW-10	10/11/2021 14:32	Temperature	20.1	C
APCO-GSD-AP-MW-10	10/11/2021 14:32	Turbidity	2.96	NTU
APCO-GSD-AP-MW-10	10/11/2021 14:37	Conductivity	371.08	uS/cm
APCO-GSD-AP-MW-10	10/11/2021 14:37	DO	0.43	mg/L
APCO-GSD-AP-MW-10	10/11/2021 14:37	Depth to Water Detail	22.98	ft
APCO-GSD-AP-MW-10	10/11/2021 14:37	Oxidation Reduction Potention	-56.1	mv
APCO-GSD-AP-MW-10	10/11/2021 14:37	pH	6.72	SU
APCO-GSD-AP-MW-10	10/11/2021 14:37	Temperature	20.11	C
APCO-GSD-AP-MW-10	10/11/2021 14:37	Turbidity	2.95	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-14	10/12/2021 8:13	Conductivity	275.89	uS/cm
APCO-GSD-AP-MW-14	10/12/2021 8:13	DO	4.58	mg/L
APCO-GSD-AP-MW-14	10/12/2021 8:13	Depth to Water Detail	22.06	ft
APCO-GSD-AP-MW-14	10/12/2021 8:13	Oxidation Reduction Potention	170.76	mv
APCO-GSD-AP-MW-14	10/12/2021 8:13	pH	4.01	SU
APCO-GSD-AP-MW-14	10/12/2021 8:13	Temperature	19.16	C
APCO-GSD-AP-MW-14	10/12/2021 8:13	Turbidity	8.86	NTU
APCO-GSD-AP-MW-14	10/12/2021 8:18	Conductivity	277.26	uS/cm
APCO-GSD-AP-MW-14	10/12/2021 8:18	DO	4.54	mg/L
APCO-GSD-AP-MW-14	10/12/2021 8:18	Depth to Water Detail	22.09	ft
APCO-GSD-AP-MW-14	10/12/2021 8:18	Oxidation Reduction Potention	169.7	mv
APCO-GSD-AP-MW-14	10/12/2021 8:18	pH	4.02	SU
APCO-GSD-AP-MW-14	10/12/2021 8:18	Temperature	19.14	C
APCO-GSD-AP-MW-14	10/12/2021 8:18	Turbidity	5.18	NTU
APCO-GSD-AP-MW-14	10/12/2021 8:23	Conductivity	277.35	uS/cm
APCO-GSD-AP-MW-14	10/12/2021 8:23	DO	4.56	mg/L
APCO-GSD-AP-MW-14	10/12/2021 8:23	Depth to Water Detail	22.09	ft
APCO-GSD-AP-MW-14	10/12/2021 8:23	Oxidation Reduction Potention	169	mv
APCO-GSD-AP-MW-14	10/12/2021 8:23	pH	4.03	SU
APCO-GSD-AP-MW-14	10/12/2021 8:23	Temperature	19.11	C
APCO-GSD-AP-MW-14	10/12/2021 8:23	Turbidity	5.04	NTU
APCO-GSD-AP-MW-14	10/12/2021 8:28	Conductivity	276.99	uS/cm
APCO-GSD-AP-MW-14	10/12/2021 8:28	DO	4.54	mg/L
APCO-GSD-AP-MW-14	10/12/2021 8:28	Depth to Water Detail	22.09	ft
APCO-GSD-AP-MW-14	10/12/2021 8:28	Oxidation Reduction Potention	167.2	mv
APCO-GSD-AP-MW-14	10/12/2021 8:28	pH	4.04	SU
APCO-GSD-AP-MW-14	10/12/2021 8:28	Temperature	19.12	C
APCO-GSD-AP-MW-14	10/12/2021 8:28	Turbidity	2.99	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-8	10/12/2021 10:20	Conductivity	392.31	uS/cm
APCO-GSD-AP-MW-8	10/12/2021 10:20	DO	0.49	mg/L
APCO-GSD-AP-MW-8	10/12/2021 10:20	Depth to Water Detail	11.82	ft
APCO-GSD-AP-MW-8	10/12/2021 10:20	Oxidation Reduction Potention	79.72	mv
APCO-GSD-AP-MW-8	10/12/2021 10:20	pH	6.47	SU
APCO-GSD-AP-MW-8	10/12/2021 10:20	Temperature	18.45	C
APCO-GSD-AP-MW-8	10/12/2021 10:20	Turbidity	14.1	NTU
APCO-GSD-AP-MW-8	10/12/2021 10:25	Conductivity	398.41	uS/cm
APCO-GSD-AP-MW-8	10/12/2021 10:25	DO	0.4	mg/L
APCO-GSD-AP-MW-8	10/12/2021 10:25	Depth to Water Detail	11.82	ft
APCO-GSD-AP-MW-8	10/12/2021 10:25	Oxidation Reduction Potention	71.01	mv
APCO-GSD-AP-MW-8	10/12/2021 10:25	pH	6.51	SU
APCO-GSD-AP-MW-8	10/12/2021 10:25	Temperature	18.44	C
APCO-GSD-AP-MW-8	10/12/2021 10:25	Turbidity	11.5	NTU
APCO-GSD-AP-MW-8	10/12/2021 10:30	Conductivity	411.62	uS/cm
APCO-GSD-AP-MW-8	10/12/2021 10:30	DO	0.36	mg/L
APCO-GSD-AP-MW-8	10/12/2021 10:30	Depth to Water Detail	11.82	ft
APCO-GSD-AP-MW-8	10/12/2021 10:30	Oxidation Reduction Potention	63.92	mv
APCO-GSD-AP-MW-8	10/12/2021 10:30	pH	6.55	SU
APCO-GSD-AP-MW-8	10/12/2021 10:30	Temperature	18.45	C
APCO-GSD-AP-MW-8	10/12/2021 10:30	Turbidity	11.75	NTU
APCO-GSD-AP-MW-8	10/12/2021 10:35	Conductivity	421.59	uS/cm
APCO-GSD-AP-MW-8	10/12/2021 10:35	DO	0.32	mg/L
APCO-GSD-AP-MW-8	10/12/2021 10:35	Depth to Water Detail	11.82	ft
APCO-GSD-AP-MW-8	10/12/2021 10:35	Oxidation Reduction Potention	62.27	mv
APCO-GSD-AP-MW-8	10/12/2021 10:35	pH	6.52	SU
APCO-GSD-AP-MW-8	10/12/2021 10:35	Temperature	18.41	C
APCO-GSD-AP-MW-8	10/12/2021 10:35	Turbidity	9.11	NTU
APCO-GSD-AP-MW-8	10/12/2021 10:40	Conductivity	432.5	uS/cm
APCO-GSD-AP-MW-8	10/12/2021 10:40	DO	0.29	mg/L
APCO-GSD-AP-MW-8	10/12/2021 10:40	Depth to Water Detail	11.82	ft
APCO-GSD-AP-MW-8	10/12/2021 10:40	Oxidation Reduction Potention	55.66	mv
APCO-GSD-AP-MW-8	10/12/2021 10:40	pH	6.57	SU
APCO-GSD-AP-MW-8	10/12/2021 10:40	Temperature	18.4	C
APCO-GSD-AP-MW-8	10/12/2021 10:40	Turbidity	7.28	NTU
APCO-GSD-AP-MW-8	10/12/2021 10:45	Conductivity	441.79	uS/cm
APCO-GSD-AP-MW-8	10/12/2021 10:45	DO	0.28	mg/L
APCO-GSD-AP-MW-8	10/12/2021 10:45	Depth to Water Detail	11.82	ft
APCO-GSD-AP-MW-8	10/12/2021 10:45	Oxidation Reduction Potention	50.05	mv
APCO-GSD-AP-MW-8	10/12/2021 10:45	pH	6.61	SU
APCO-GSD-AP-MW-8	10/12/2021 10:45	Temperature	18.42	C
APCO-GSD-AP-MW-8	10/12/2021 10:45	Turbidity	5.89	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-9	10/12/2021 11:21	Conductivity	232.51	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:21	DO	0.27	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:21	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:21	Oxidation Reduction Potention	63.3	mv
APCO-GSD-AP-MW-9	10/12/2021 11:21	pH	6.48	SU
APCO-GSD-AP-MW-9	10/12/2021 11:21	Temperature	18.96	C
APCO-GSD-AP-MW-9	10/12/2021 11:21	Turbidity	11.21	NTU
APCO-GSD-AP-MW-9	10/12/2021 11:26	Conductivity	249.84	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:26	DO	0.24	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:26	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:26	Oxidation Reduction Potention	60.95	mv
APCO-GSD-AP-MW-9	10/12/2021 11:26	pH	6.57	SU
APCO-GSD-AP-MW-9	10/12/2021 11:26	Temperature	18.98	C
APCO-GSD-AP-MW-9	10/12/2021 11:26	Turbidity	4.77	NTU
APCO-GSD-AP-MW-9	10/12/2021 11:31	Conductivity	276.62	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:31	DO	0.23	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:31	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:31	Oxidation Reduction Potention	62.83	mv
APCO-GSD-AP-MW-9	10/12/2021 11:31	pH	6.61	SU
APCO-GSD-AP-MW-9	10/12/2021 11:31	Temperature	18.97	C
APCO-GSD-AP-MW-9	10/12/2021 11:31	Turbidity	3.45	NTU
APCO-GSD-AP-MW-9	10/12/2021 11:36	Conductivity	292	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:36	DO	0.22	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:36	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:36	Oxidation Reduction Potention	58.08	mv
APCO-GSD-AP-MW-9	10/12/2021 11:36	pH	6.73	SU
APCO-GSD-AP-MW-9	10/12/2021 11:36	Temperature	18.91	C
APCO-GSD-AP-MW-9	10/12/2021 11:36	Turbidity	2.17	NTU
APCO-GSD-AP-MW-9	10/12/2021 11:41	Conductivity	301.3	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:41	DO	0.23	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:41	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:41	Oxidation Reduction Potention	53.68	mv
APCO-GSD-AP-MW-9	10/12/2021 11:41	pH	6.81	SU
APCO-GSD-AP-MW-9	10/12/2021 11:41	Temperature	18.95	C
APCO-GSD-AP-MW-9	10/12/2021 11:41	Turbidity	1.77	NTU
APCO-GSD-AP-MW-9	10/12/2021 11:46	Conductivity	307.64	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:46	DO	0.22	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:46	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:46	Oxidation Reduction Potention	51.26	mv
APCO-GSD-AP-MW-9	10/12/2021 11:46	pH	6.86	SU
APCO-GSD-AP-MW-9	10/12/2021 11:46	Temperature	18.96	C
APCO-GSD-AP-MW-9	10/12/2021 11:46	Turbidity	1.93	NTU
APCO-GSD-AP-MW-9	10/12/2021 11:51	Conductivity	313.11	uS/cm
APCO-GSD-AP-MW-9	10/12/2021 11:51	DO	0.21	mg/L
APCO-GSD-AP-MW-9	10/12/2021 11:51	Depth to Water Detail	12.98	ft
APCO-GSD-AP-MW-9	10/12/2021 11:51	Oxidation Reduction Potention	49.19	mv
APCO-GSD-AP-MW-9	10/12/2021 11:51	pH	6.9	SU
APCO-GSD-AP-MW-9	10/12/2021 11:51	Temperature	18.97	C
APCO-GSD-AP-MW-9	10/12/2021 11:51	Turbidity	2.25	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-11	10/12/2021 12:37	Conductivity	583.42	uS/cm
APCO-GSD-AP-MW-11	10/12/2021 12:37	DO	0.34	mg/L
APCO-GSD-AP-MW-11	10/12/2021 12:37	Depth to Water Detail	9.74	ft
APCO-GSD-AP-MW-11	10/12/2021 12:37	Oxidation Reduction Potention	45	mv
APCO-GSD-AP-MW-11	10/12/2021 12:37	pH	6.58	SU
APCO-GSD-AP-MW-11	10/12/2021 12:37	Temperature	19.99	C
APCO-GSD-AP-MW-11	10/12/2021 12:37	Turbidity	14.2	NTU
APCO-GSD-AP-MW-11	10/12/2021 12:42	Conductivity	576.48	uS/cm
APCO-GSD-AP-MW-11	10/12/2021 12:42	DO	0.29	mg/L
APCO-GSD-AP-MW-11	10/12/2021 12:42	Depth to Water Detail	9.79	ft
APCO-GSD-AP-MW-11	10/12/2021 12:42	Oxidation Reduction Potention	32.88	mv
APCO-GSD-AP-MW-11	10/12/2021 12:42	pH	6.65	SU
APCO-GSD-AP-MW-11	10/12/2021 12:42	Temperature	19.98	C
APCO-GSD-AP-MW-11	10/12/2021 12:42	Turbidity	10.99	NTU
APCO-GSD-AP-MW-11	10/12/2021 12:47	Conductivity	577.63	uS/cm
APCO-GSD-AP-MW-11	10/12/2021 12:47	DO	0.24	mg/L
APCO-GSD-AP-MW-11	10/12/2021 12:47	Depth to Water Detail	9.79	ft
APCO-GSD-AP-MW-11	10/12/2021 12:47	Oxidation Reduction Potention	24.77	mv
APCO-GSD-AP-MW-11	10/12/2021 12:47	pH	6.65	SU
APCO-GSD-AP-MW-11	10/12/2021 12:47	Temperature	19.97	C
APCO-GSD-AP-MW-11	10/12/2021 12:47	Turbidity	7.04	NTU
APCO-GSD-AP-MW-11	10/12/2021 12:52	Conductivity	577.54	uS/cm
APCO-GSD-AP-MW-11	10/12/2021 12:52	DO	0.21	mg/L
APCO-GSD-AP-MW-11	10/12/2021 12:52	Depth to Water Detail	9.79	ft
APCO-GSD-AP-MW-11	10/12/2021 12:52	Oxidation Reduction Potention	18.62	mv
APCO-GSD-AP-MW-11	10/12/2021 12:52	pH	6.66	SU
APCO-GSD-AP-MW-11	10/12/2021 12:52	Temperature	19.95	C
APCO-GSD-AP-MW-11	10/12/2021 12:52	Turbidity	7.01	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2	10/11/2021 13:46	Conductivity	506.85	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 13:46	DO	0.21	mg/L
APCO-GSD-AP-MW-2	10/11/2021 13:46	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 13:46	Oxidation Reduction Potention	-40.48	mv
APCO-GSD-AP-MW-2	10/11/2021 13:46	pH	6.56	SU
APCO-GSD-AP-MW-2	10/11/2021 13:46	Temperature	21.23	C
APCO-GSD-AP-MW-2	10/11/2021 13:46	Turbidity	92.7	NTU
APCO-GSD-AP-MW-2	10/11/2021 13:51	Conductivity	516.15	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 13:51	DO	0.18	mg/L
APCO-GSD-AP-MW-2	10/11/2021 13:51	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 13:51	Oxidation Reduction Potention	-39.98	mv
APCO-GSD-AP-MW-2	10/11/2021 13:51	pH	6.56	SU
APCO-GSD-AP-MW-2	10/11/2021 13:51	Temperature	21.2	C
APCO-GSD-AP-MW-2	10/11/2021 13:51	Turbidity	63.9	NTU
APCO-GSD-AP-MW-2	10/11/2021 13:56	Conductivity	527.86	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 13:56	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 13:56	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 13:56	Oxidation Reduction Potention	-40.02	mv
APCO-GSD-AP-MW-2	10/11/2021 13:56	pH	6.54	SU
APCO-GSD-AP-MW-2	10/11/2021 13:56	Temperature	21.19	C
APCO-GSD-AP-MW-2	10/11/2021 13:56	Turbidity	99	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:01	Conductivity	531.05	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:01	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:01	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:01	Oxidation Reduction Potention	-40.01	mv
APCO-GSD-AP-MW-2	10/11/2021 14:01	pH	6.54	SU
APCO-GSD-AP-MW-2	10/11/2021 14:01	Temperature	21.37	C
APCO-GSD-AP-MW-2	10/11/2021 14:01	Turbidity	83.2	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:06	Conductivity	531.16	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:06	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:06	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:06	Oxidation Reduction Potention	-41.18	mv
APCO-GSD-AP-MW-2	10/11/2021 14:06	pH	6.41	SU
APCO-GSD-AP-MW-2	10/11/2021 14:06	Temperature	20.96	C
APCO-GSD-AP-MW-2	10/11/2021 14:06	Turbidity	52	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:11	Conductivity	528.59	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:11	DO	0.15	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:11	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:11	Oxidation Reduction Potention	-42.41	mv
APCO-GSD-AP-MW-2	10/11/2021 14:11	pH	6.47	SU
APCO-GSD-AP-MW-2	10/11/2021 14:11	Temperature	21.11	C
APCO-GSD-AP-MW-2	10/11/2021 14:11	Turbidity	36.5	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:16	Conductivity	529.93	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:16	DO	0.15	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:16	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:16	Oxidation Reduction Potention	-43.23	mv
APCO-GSD-AP-MW-2	10/11/2021 14:16	pH	6.51	SU
APCO-GSD-AP-MW-2	10/11/2021 14:16	Temperature	21.18	C
APCO-GSD-AP-MW-2	10/11/2021 14:16	Turbidity	31.2	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:21	Conductivity	528.9	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:21	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:21	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:21	Oxidation Reduction Potention	-43.9	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2	10/11/2021 14:21	pH	6.49	SU
APCO-GSD-AP-MW-2	10/11/2021 14:21	Temperature	21.15	C
APCO-GSD-AP-MW-2	10/11/2021 14:21	Turbidity	23.7	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:26	Conductivity	527.88	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:26	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:26	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:26	Oxidation Reduction Potention	-44.53	mv
APCO-GSD-AP-MW-2	10/11/2021 14:26	pH	6.52	SU
APCO-GSD-AP-MW-2	10/11/2021 14:26	Temperature	21.11	C
APCO-GSD-AP-MW-2	10/11/2021 14:26	Turbidity	14.5	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:31	Conductivity	526.89	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:31	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:31	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:31	Oxidation Reduction Potention	-44.99	mv
APCO-GSD-AP-MW-2	10/11/2021 14:31	pH	6.63	SU
APCO-GSD-AP-MW-2	10/11/2021 14:31	Temperature	21.05	C
APCO-GSD-AP-MW-2	10/11/2021 14:31	Turbidity	12.49	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:36	Conductivity	525.47	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:36	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:36	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:36	Oxidation Reduction Potention	-45.69	mv
APCO-GSD-AP-MW-2	10/11/2021 14:36	pH	6.56	SU
APCO-GSD-AP-MW-2	10/11/2021 14:36	Temperature	21.26	C
APCO-GSD-AP-MW-2	10/11/2021 14:36	Turbidity	10.34	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:41	Conductivity	526.78	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:41	DO	0.16	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:41	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:41	Oxidation Reduction Potention	-45.95	mv
APCO-GSD-AP-MW-2	10/11/2021 14:41	pH	6.6	SU
APCO-GSD-AP-MW-2	10/11/2021 14:41	Temperature	21.25	C
APCO-GSD-AP-MW-2	10/11/2021 14:41	Turbidity	8.58	NTU
APCO-GSD-AP-MW-2	10/11/2021 14:46	Conductivity	524.27	uS/cm
APCO-GSD-AP-MW-2	10/11/2021 14:46	DO	0.17	mg/L
APCO-GSD-AP-MW-2	10/11/2021 14:46	Depth to Water Detail	12.57	ft
APCO-GSD-AP-MW-2	10/11/2021 14:46	Oxidation Reduction Potention	-46.1	mv
APCO-GSD-AP-MW-2	10/11/2021 14:46	pH	6.59	SU
APCO-GSD-AP-MW-2	10/11/2021 14:46	Temperature	21.2	C
APCO-GSD-AP-MW-2	10/11/2021 14:46	Turbidity	6.7	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	Conductivity	1155.14	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	DO	0.15	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	Depth to Water Detail	13.5	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	Oxidation Reduction Potention	-185.58	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	pH	8.24	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	Temperature	19.02	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:15	Turbidity	12.5	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	Conductivity	1132.78	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	DO	0.12	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	Depth to Water Detail	15.88	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	Oxidation Reduction Potention	-192.35	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	pH	8.28	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	Temperature	19	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:20	Turbidity	13.35	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	Conductivity	1124.18	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	DO	0.16	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	Depth to Water Detail	18.76	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	Oxidation Reduction Potention	-193.29	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	pH	8.29	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	Temperature	18.99	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:25	Turbidity	12.7	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	Conductivity	1119.02	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	DO	0.19	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	Depth to Water Detail	20.92	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	Oxidation Reduction Potention	-194.97	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	pH	8.32	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	Temperature	18.97	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:30	Turbidity	10.96	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	Conductivity	1098.7	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	DO	0.22	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	Depth to Water Detail	23.7	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	Oxidation Reduction Potention	-196.6	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	pH	8.33	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	Temperature	18.88	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:35	Turbidity	8.39	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	Conductivity	1070.89	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	DO	0.24	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	Depth to Water Detail	26.13	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	Oxidation Reduction Potention	-197.01	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	pH	8.37	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	Temperature	18.79	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:40	Turbidity	5.33	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	Conductivity	1055.88	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	DO	0.25	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	Depth to Water Detail	28.3	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	Oxidation Reduction Potention	-197.85	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	pH	8.37	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	Temperature	18.74	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:45	Turbidity	5.77	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	Conductivity	1042.84	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	DO	0.27	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	Depth to Water Detail	30.75	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	Oxidation Reduction Potention	-198.47	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	pH	8.4	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	Temperature	18.69	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:50	Turbidity	5.44	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	Conductivity	1025.1	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	DO	0.28	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	Depth to Water Detail	32.58	ft
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	Oxidation Reduction Potention	-198.86	mv
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	pH	8.43	SU
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	Temperature	18.69	C
APCO-GSD-AP-MW-2VB	10/12/2021 8:55	Turbidity	5.38	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	Conductivity	963.46	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	DO	0.27	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	Depth to Water Detail	34.7	ft
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	Oxidation Reduction Potention	-196.8	mv
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	pH	8.44	SU
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	Temperature	18.58	C
APCO-GSD-AP-MW-2VB	10/12/2021 9:00	Turbidity	4.85	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	Conductivity	936.54	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	DO	0.28	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	Depth to Water Detail	36.89	ft
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	Oxidation Reduction Potention	-194.29	mv
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	pH	8.44	SU
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	Temperature	18.58	C
APCO-GSD-AP-MW-2VB	10/12/2021 9:05	Turbidity	4.71	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	Conductivity	925.16	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	DO	0.27	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	Depth to Water Detail	38.82	ft
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	Oxidation Reduction Potention	-192.84	mv
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	pH	8.46	SU
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	Temperature	18.59	C
APCO-GSD-AP-MW-2VB	10/12/2021 9:10	Turbidity	4.38	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	Conductivity	924.51	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	DO	0.54	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	Depth to Water Detail	38.91	ft
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	Oxidation Reduction Potention	-185.9	mv
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	pH	8.51	SU
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	Temperature	19.59	C
APCO-GSD-AP-MW-2VB	10/12/2021 9:15	Turbidity	4.4	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	Conductivity	927.15	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	DO	0.59	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	Depth to Water Detail	38.94	ft
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	Oxidation Reduction Potention	-186.2	mv
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	pH	8.5	SU
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	Temperature	19.73	C
APCO-GSD-AP-MW-2VB	10/12/2021 9:20	Turbidity	5.57	NTU
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	Conductivity	901.38	uS/cm
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	DO	0.37	mg/L
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	Depth to Water Detail	38.95	ft
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	Oxidation Reduction Potention	-195.47	mv
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	pH	8.62	SU
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	Temperature	19.31	C
APCO-GSD-AP-MW-2VB	10/12/2021 9:25	Turbidity	4.01	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-18H	10/12/2021 10:29	Conductivity	49.03	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:29	DO	8.02	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:29	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:29	Oxidation Reduction Potention	133.6	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:29	pH	4.89	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:29	Temperature	17.6	C
APCO-GSD-AP-MW-18H	10/12/2021 10:29	Turbidity	3.9	NTU
APCO-GSD-AP-MW-18H	10/12/2021 10:34	Conductivity	51.32	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:34	DO	7.92	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:34	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:34	Oxidation Reduction Potention	152.44	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:34	pH	4.77	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:34	Temperature	17.56	C
APCO-GSD-AP-MW-18H	10/12/2021 10:34	Turbidity	2.13	NTU
APCO-GSD-AP-MW-18H	10/12/2021 10:39	Conductivity	70.8	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:39	DO	7.78	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:39	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:39	Oxidation Reduction Potention	156.21	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:39	pH	4.79	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:39	Temperature	17.5	C
APCO-GSD-AP-MW-18H	10/12/2021 10:39	Turbidity	2.59	NTU
APCO-GSD-AP-MW-18H	10/12/2021 10:44	Conductivity	87.15	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:44	DO	7.62	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:44	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:44	Oxidation Reduction Potention	159.31	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:44	pH	4.93	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:44	Temperature	17.54	C
APCO-GSD-AP-MW-18H	10/12/2021 10:44	Turbidity	1.45	NTU
APCO-GSD-AP-MW-18H	10/12/2021 10:49	Conductivity	96.07	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:49	DO	7.51	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:49	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:49	Oxidation Reduction Potention	159.72	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:49	pH	4.99	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:49	Temperature	17.54	C
APCO-GSD-AP-MW-18H	10/12/2021 10:49	Turbidity	1.52	NTU
APCO-GSD-AP-MW-18H	10/12/2021 10:54	Conductivity	104.04	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:54	DO	7.39	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:54	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:54	Oxidation Reduction Potention	161.52	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:54	pH	5	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:54	Temperature	17.55	C
APCO-GSD-AP-MW-18H	10/12/2021 10:54	Turbidity	1.22	NTU
APCO-GSD-AP-MW-18H	10/12/2021 10:59	Conductivity	106.42	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 10:59	DO	7.31	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 10:59	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 10:59	Oxidation Reduction Potention	162.34	mv
APCO-GSD-AP-MW-18H	10/12/2021 10:59	pH	5.05	SU
APCO-GSD-AP-MW-18H	10/12/2021 10:59	Temperature	17.56	C
APCO-GSD-AP-MW-18H	10/12/2021 10:59	Turbidity	1.69	NTU
APCO-GSD-AP-MW-18H	10/12/2021 11:04	Conductivity	113.24	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 11:04	DO	7.33	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 11:04	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 11:04	Oxidation Reduction Potention	161.49	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-18H	10/12/2021 11:04	pH	5.08	SU
APCO-GSD-AP-MW-18H	10/12/2021 11:04	Temperature	17.52	C
APCO-GSD-AP-MW-18H	10/12/2021 11:04	Turbidity	1.61	NTU
APCO-GSD-AP-MW-18H	10/12/2021 11:09	Conductivity	112.89	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 11:09	DO	7.3	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 11:09	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 11:09	Oxidation Reduction Potention	160.22	mv
APCO-GSD-AP-MW-18H	10/12/2021 11:09	pH	5.14	SU
APCO-GSD-AP-MW-18H	10/12/2021 11:09	Temperature	17.53	C
APCO-GSD-AP-MW-18H	10/12/2021 11:09	Turbidity	1.6	NTU
APCO-GSD-AP-MW-18H	10/12/2021 11:14	Conductivity	115.05	uS/cm
APCO-GSD-AP-MW-18H	10/12/2021 11:14	DO	7.35	mg/L
APCO-GSD-AP-MW-18H	10/12/2021 11:14	Depth to Water Detail	10.51	ft
APCO-GSD-AP-MW-18H	10/12/2021 11:14	Oxidation Reduction Potention	162.28	mv
APCO-GSD-AP-MW-18H	10/12/2021 11:14	pH	5.12	SU
APCO-GSD-AP-MW-18H	10/12/2021 11:14	Temperature	17.56	C
APCO-GSD-AP-MW-18H	10/12/2021 11:14	Turbidity	1.54	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-19H	10/11/2021 12:39	Conductivity	338.14	uS/cm
APCO-GSD-AP-MW-19H	10/11/2021 12:39	DO	0.45	mg/L
APCO-GSD-AP-MW-19H	10/11/2021 12:39	Depth to Water Detail	4.23	ft
APCO-GSD-AP-MW-19H	10/11/2021 12:39	Oxidation Reduction Potention	-4.52	mv
APCO-GSD-AP-MW-19H	10/11/2021 12:39	pH	6.39	SU
APCO-GSD-AP-MW-19H	10/11/2021 12:39	Temperature	25.7	C
APCO-GSD-AP-MW-19H	10/11/2021 12:39	Turbidity	15.4	NTU
APCO-GSD-AP-MW-19H	10/11/2021 12:44	Conductivity	328.36	uS/cm
APCO-GSD-AP-MW-19H	10/11/2021 12:44	DO	0.3	mg/L
APCO-GSD-AP-MW-19H	10/11/2021 12:44	Depth to Water Detail	4.23	ft
APCO-GSD-AP-MW-19H	10/11/2021 12:44	Oxidation Reduction Potention	8.93	mv
APCO-GSD-AP-MW-19H	10/11/2021 12:44	pH	6.22	SU
APCO-GSD-AP-MW-19H	10/11/2021 12:44	Temperature	22.96	C
APCO-GSD-AP-MW-19H	10/11/2021 12:44	Turbidity	9.85	NTU
APCO-GSD-AP-MW-19H	10/11/2021 12:49	Conductivity	321.32	uS/cm
APCO-GSD-AP-MW-19H	10/11/2021 12:49	DO	0.28	mg/L
APCO-GSD-AP-MW-19H	10/11/2021 12:49	Depth to Water Detail	4.23	ft
APCO-GSD-AP-MW-19H	10/11/2021 12:49	Oxidation Reduction Potention	16.93	mv
APCO-GSD-AP-MW-19H	10/11/2021 12:49	pH	6.11	SU
APCO-GSD-AP-MW-19H	10/11/2021 12:49	Temperature	24.12	C
APCO-GSD-AP-MW-19H	10/11/2021 12:49	Turbidity	6.98	NTU
APCO-GSD-AP-MW-19H	10/11/2021 12:54	Conductivity	315.23	uS/cm
APCO-GSD-AP-MW-19H	10/11/2021 12:54	DO	0.27	mg/L
APCO-GSD-AP-MW-19H	10/11/2021 12:54	Depth to Water Detail	4.23	ft
APCO-GSD-AP-MW-19H	10/11/2021 12:54	Oxidation Reduction Potention	22	mv
APCO-GSD-AP-MW-19H	10/11/2021 12:54	pH	6.08	SU
APCO-GSD-AP-MW-19H	10/11/2021 12:54	Temperature	24.19	C
APCO-GSD-AP-MW-19H	10/11/2021 12:54	Turbidity	7.48	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	Conductivity	359.33	uS/cm
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	DO	0.19	mg/L
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	Depth to Water Detail	6.08	ft
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	Oxidation Reduction Potention	-137.27	mv
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	pH	7.87	SU
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	Temperature	18.37	C
APCO-GSD-AP-MW-22VB	10/11/2021 11:09	Turbidity	10.5	NTU
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	Conductivity	366.81	uS/cm
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	DO	0.14	mg/L
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	Depth to Water Detail	6.56	ft
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	Oxidation Reduction Potention	-159.55	mv
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	pH	8.01	SU
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	Temperature	18.2	C
APCO-GSD-AP-MW-22VB	10/11/2021 11:14	Turbidity	9.89	NTU
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	Conductivity	370.37	uS/cm
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	DO	0.12	mg/L
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	Depth to Water Detail	6.84	ft
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	Oxidation Reduction Potention	-167.37	mv
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	pH	8.11	SU
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	Temperature	18.14	C
APCO-GSD-AP-MW-22VB	10/11/2021 11:19	Turbidity	4.65	NTU
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	Conductivity	371.8	uS/cm
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	DO	0.11	mg/L
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	Depth to Water Detail	7.08	ft
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	Oxidation Reduction Potention	-174.3	mv
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	pH	8.06	SU
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	Temperature	18.21	C
APCO-GSD-AP-MW-22VB	10/11/2021 11:24	Turbidity	3.69	NTU
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	Conductivity	371.5	uS/cm
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	DO	0.1	mg/L
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	Depth to Water Detail	7.18	ft
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	Oxidation Reduction Potention	-170.32	mv
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	pH	8.12	SU
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	Temperature	18.03	C
APCO-GSD-AP-MW-22VB	10/11/2021 11:29	Turbidity	3.09	NTU
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	Conductivity	370.58	uS/cm
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	DO	0.1	mg/L
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	Depth to Water Detail	7.3	ft
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	Oxidation Reduction Potention	-164.26	mv
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	pH	8.13	SU
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	Temperature	18.07	C
APCO-GSD-AP-MW-22VB	10/11/2021 11:34	Turbidity	2.76	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-PZ-5	10/12/2021 11:58	Conductivity	41.42	uS/cm
APCO-GSD-AP-PZ-5	10/12/2021 11:58	DO	3.74	mg/L
APCO-GSD-AP-PZ-5	10/12/2021 11:58	Depth to Water Detail	11.33	ft
APCO-GSD-AP-PZ-5	10/12/2021 11:58	Oxidation Reduction Potention	149.05	mv
APCO-GSD-AP-PZ-5	10/12/2021 11:58	pH	5.29	SU
APCO-GSD-AP-PZ-5	10/12/2021 11:58	Temperature	17.9	C
APCO-GSD-AP-PZ-5	10/12/2021 11:58	Turbidity	5.2	NTU
APCO-GSD-AP-PZ-5	10/12/2021 12:03	Conductivity	41.47	uS/cm
APCO-GSD-AP-PZ-5	10/12/2021 12:03	DO	3.84	mg/L
APCO-GSD-AP-PZ-5	10/12/2021 12:03	Depth to Water Detail	11.33	ft
APCO-GSD-AP-PZ-5	10/12/2021 12:03	Oxidation Reduction Potention	148.34	mv
APCO-GSD-AP-PZ-5	10/12/2021 12:03	pH	5.3	SU
APCO-GSD-AP-PZ-5	10/12/2021 12:03	Temperature	18.01	C
APCO-GSD-AP-PZ-5	10/12/2021 12:03	Turbidity	2.38	NTU
APCO-GSD-AP-PZ-5	10/12/2021 12:08	Conductivity	41.47	uS/cm
APCO-GSD-AP-PZ-5	10/12/2021 12:08	DO	3.87	mg/L
APCO-GSD-AP-PZ-5	10/12/2021 12:08	Depth to Water Detail	11.33	ft
APCO-GSD-AP-PZ-5	10/12/2021 12:08	Oxidation Reduction Potention	145.75	mv
APCO-GSD-AP-PZ-5	10/12/2021 12:08	pH	5.33	SU
APCO-GSD-AP-PZ-5	10/12/2021 12:08	Temperature	17.86	C
APCO-GSD-AP-PZ-5	10/12/2021 12:08	Turbidity	2.13	NTU
APCO-GSD-AP-PZ-5	10/12/2021 12:13	Conductivity	41.42	uS/cm
APCO-GSD-AP-PZ-5	10/12/2021 12:13	DO	3.89	mg/L
APCO-GSD-AP-PZ-5	10/12/2021 12:13	Depth to Water Detail	11.33	ft
APCO-GSD-AP-PZ-5	10/12/2021 12:13	Oxidation Reduction Potention	143.52	mv
APCO-GSD-AP-PZ-5	10/12/2021 12:13	pH	5.33	SU
APCO-GSD-AP-PZ-5	10/12/2021 12:13	Temperature	17.84	C
APCO-GSD-AP-PZ-5	10/12/2021 12:13	Turbidity	2.08	NTU

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-PZ-6	10/12/2021 13:02	Conductivity	42.65	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:02	DO	4.74	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:02	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:02	Oxidation Reduction Potention	146.9	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:02	pH	5.43	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:02	Temperature	19.58	C
APCO-GSD-AP-PZ-6	10/12/2021 13:02	Turbidity	79.9	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:07	Conductivity	42.74	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:07	DO	4.78	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:07	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:07	Oxidation Reduction Potention	142.01	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:07	pH	5.48	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:07	Temperature	19.64	C
APCO-GSD-AP-PZ-6	10/12/2021 13:07	Turbidity	46.2	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:12	Conductivity	43.11	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:12	DO	4.78	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:12	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:12	Oxidation Reduction Potention	137.58	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:12	pH	5.56	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:12	Temperature	19.62	C
APCO-GSD-AP-PZ-6	10/12/2021 13:12	Turbidity	23	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:17	Conductivity	43.05	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:17	DO	4.9	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:17	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:17	Oxidation Reduction Potention	147.16	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:17	pH	5.39	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:17	Temperature	19.6	C
APCO-GSD-AP-PZ-6	10/12/2021 13:17	Turbidity	16.5	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:22	Conductivity	42.9	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:22	DO	4.96	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:22	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:22	Oxidation Reduction Potention	139.56	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:22	pH	5.51	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:22	Temperature	19.48	C
APCO-GSD-AP-PZ-6	10/12/2021 13:22	Turbidity	11.2	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:27	Conductivity	42.91	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:27	DO	5.01	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:27	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:27	Oxidation Reduction Potention	137.04	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:27	pH	5.57	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:27	Temperature	19.48	C
APCO-GSD-AP-PZ-6	10/12/2021 13:27	Turbidity	10.12	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:32	Conductivity	42.94	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:32	DO	5.03	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:32	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:32	Oxidation Reduction Potention	135.52	mv
APCO-GSD-AP-PZ-6	10/12/2021 13:32	pH	5.59	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:32	Temperature	19.52	C
APCO-GSD-AP-PZ-6	10/12/2021 13:32	Turbidity	7.63	NTU
APCO-GSD-AP-PZ-6	10/12/2021 13:37	Conductivity	42.98	uS/cm
APCO-GSD-AP-PZ-6	10/12/2021 13:37	DO	5.04	mg/L
APCO-GSD-AP-PZ-6	10/12/2021 13:37	Depth to Water Detail	6.62	ft
APCO-GSD-AP-PZ-6	10/12/2021 13:37	Oxidation Reduction Potention	145.69	mv

Alabama Power Company Plant Gadsden Ash Pond				
WELL ID	**TIME OF READING**	**DESCRIPTION**	**VALUE**	**UNIT**
APCO-GSD-AP-PZ-6	10/12/2021 13:37	pH	5.41	SU
APCO-GSD-AP-PZ-6	10/12/2021 13:37	Temperature	19.58	C
APCO-GSD-AP-PZ-6	10/12/2021 13:37	Turbidity	6.06	NTU

Appendix D

Appendix D. Horiztonal Groundwater Flow Velocity Calculations
Plant Gadsden Ash Storage Pond

2021 1st Semi-Annual Monitoring Event								
Date	**PZ-6** h_1 **(ft)**	**MW-10** h_2 **(ft)**	**Distance** Δl **(ft)**	**Hydraulic Gradient** $\Delta h/\Delta l$ **(ft/ft)**	**Hydraulic Conductivity K**	**Effective Porosity n**	**Calculated Groundwater Flow Velocity (ft/d)**	**Calculated Groundwater Flow Velocity (ft/yr)**
10/4/2021	513.18	509.19	1455.00	0.00274	12.33	0.20	0.169	61.7

Notes:

ft=feet
ft/d = feet/day
ft/ft = feet per foot
ft/yr = feet per year

Appendix D. Horizontal Groundwater Flow Velocity Calculations
Plant Gadsden Ash Pond

2022 2nd Semi-Annual Monitoring Event								
Date of Measurement	**PZ-6** h_1 **(ft)**	**MW-10** h_2 **(ft)**	**Distance** Δl **(ft)**	**Hydraulic Gradient** $\Delta h/\Delta l$ **(ft/ft)**	**Hydraulic Conductivity** **K**	**Effective Porosity** **n**	**Calculated Groundwater Flow Velocity** **(ft/d)**	**Calculated Groundwater Flow Velocity** **(ft/yr)**
5/5/2022	515.77	509.05	1455.0	0.00462	12.33	0.20	0.28	103.93

Notes:

ft = feet

ft/d = feet/day

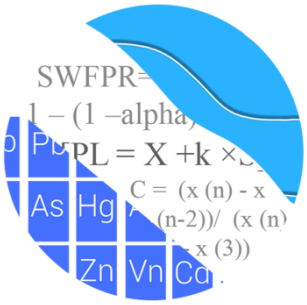
ft/ft = feet per foot

ft/yr = feet per year

Appendix E

GROUNDWATER STATS CONSULTING

January 14, 2022



Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gadsden Ash Pond
Background Update & 1st 2021 Semi-Annual Analysis – October 2021

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the background update and statistical analysis of groundwater data for the October 2021 1st 2021 semi-annual sample event for Alabama Power Company's Plant Gadsden Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the CCR program in December 2017, and at least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GSD-AP-MW-14, GSD-AP-MW-16, and GSD-AP-MW-17
- **Downgradient wells:** GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6
- **Delineation wells:** GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-4V, GSD-AP-MW-18H, GSD-AP-MW-19H, GSD-AP-MW-20H, GSD-AP-MW-21VC, and GSD-AP-MW-22VB
- **Piezometers:** GSD-AP-MW-2V

Note that delineation wells did not require statistics; therefore, data for these wells were plotted only on time series and box plots. Downgradient well GSD-AP-PZ-2 has recently been converted from a piezometer to a downgradient well. Since this well has been sampled at least 4 times, data from this well are evaluated with confidence intervals for Appendix IV constituents. Prediction limits will be used to evaluate Appendix III constituents when a minimum of 8 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

> **Appendix III** (Detection Monitoring) - boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) - antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 13
- # Background Samples (Interwell): 43
- # Constituents: 7
- # Downgradient wells: 15

Note that previous analyses utilized a 1-of-3 resample plan for parameters that use intrawell statistical methods; however, during this analysis, power curves demonstrate that the increased number of samples in background provide sufficient power using the 1-of-2 resample plan.

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for fluoride and pH
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.

- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new samples are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in April 2019

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, two outliers were identified. A summary of those findings was included with the 2019 background screening. While this is not the case in the present data set, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e. measurements reported by the laboratory between the

Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one value was flagged as an outlier in the database since the other value was similar to remaining measurements within the same well and neighboring wells. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing and increasing trends for the Appendix III parameters and were included with the 2019 background screening. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with less than two years of record, making it difficult to separate trends from normal year-to-year variation; therefore, no adjustments were made to the data sets. If the observed

decreasing or increasing trends persist over a longer time frame, some records may need to be truncated.

Appendix III – Evaluation of Statistical Approaches

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

Based on the results of the 2019 background screening for Appendix III parameters, intrawell methods were recommended for fluoride and pH, and interwell methods were recommended for boron, calcium, chloride, sulfate, and TDS. If further evaluation confirms natural variation in groundwater, intrawell methods will be considered for parameters currently recommended for interwell methods.

Background Update – Conducted in Fall 2021

Outlier Analysis

Prior to performing prediction limits, proposed background data through March 2021 were reviewed through visual screening to identify any newly suspected outliers at all wells for fluoride and pH and at upgradient wells for boron, calcium, chloride, sulfate, and TDS. When identified as outliers, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. No suspected outliers were identified for Appendix III parameters. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages.

Mann-Whitney Test of Medians

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through February 7, 2019,

to compliance data through March 2021. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase:

- Fluoride: GSD-AP-MW-1

Decrease:

- pH: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a naturally occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

While a statistically significant increase in median concentrations was identified for fluoride in well GSD-AP-MW-1, this record was updated with more recent data because the compliance data contained 100% non-detects. Although statistically significant decreases in median concentrations were identified for pH in wells GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11, the magnitude of the decreases were marginal compared to the historical concentrations. Therefore, in this analysis, all of the records with statistically significant Mann-Whitney results for CCR Appendix III constituents that use intrawell methods were updated.

All records will be re-evaluated during the next background update and if future concentrations are similar to those observed currently, the earlier portion of the records may require deselection so only more recent data are used to construct statistical limits which are reflective of present-day water quality conditions. If, however, concentrations return to historical lower levels, more recent higher measurements may be flagged as outliers and deselected prior to construction of statistical limits.

Trend Tests – Upgradient Wells

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits (Figure E). When

statistically significant increasing trends are identified in upgradient wells, the earlier portion of data may require deselection prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. The following upgradient well/constituent pairs were found to have statistically significant trends:

Increasing
- None

Decreasing
- Chloride: GSD-AP-MW-17

The slope for chloride at well GSD-AP-MW-17 is influenced by several similar and slightly higher values earlier in the record, but the median slope for the overall record was small relative to average concentrations at these wells and reported measurements were similar across all upgradient wells. Therefore, no adjustments were required at this time.

Evaluation of Appendix III Parameters – October 2021

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Background data are re-evaluated when a minimum of 4 compliance samples are available.

Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for fluoride and pH using screened background data through March 2021 at each well (Figure F). The October 2021 sample at each well was compared to its respective intrawell prediction limit. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs, and a summary of all flagged outliers follows this report (Figure C).

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, sulfate, and TDS (Figure G).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. The following exceedances were noted for the intrawell and interwell prediction limits:

Intrawell

- Fluoride: GSD-AP-MW-5, GSD-AP-MW-10, and GSD-AP-MW-11
- pH: GSD-AP-MW-12

Interwell

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, and GSD-AP-MW-11
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-5, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
- Chloride: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
- Sulfate: GSD-AP-MW-1 and GSD-AP-MW-3
- TDS: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-11, and GSD-AP-MW-12

Trend Tests

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an

indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Boron: GSD-AP-MW-3
- Calcium: GSD-AP-MW-11
- Fluoride: GSD-AP-MW-11
- TDS: GSD-AP-MW-11

Decreasing:

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-4, and GSD-AP-MW-5
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3
- Chloride: GSD-AP-MW-17 (upgradient) and GSD-AP-MW-3
- pH: GSD-AP-MW-16 (upgradient),
- TDS: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3

Evaluation of Appendix IV Parameters – October 2021

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new values were flagged as outliers. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during this 2021 1st semi-annual statistical analysis. The GWPS will be updated again during the 2023 1st semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using tolerance limits constructed from pooled upgradient well data through October 2021 (Figure I). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed.

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure J) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through October 2021 for each of the Appendix IV parameters (Figure K). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects.

As mentioned above, well/constituent pairs containing 100% non-detects did not require statistics and were, therefore, deselected prior to construction confidence intervals. A list of deselected well/constituent pairs also follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter. No exceedances were noted for any of the well/constituent pairs.

- Arsenic: GSD-AP-MW-2 and GSD-AP-MW-4

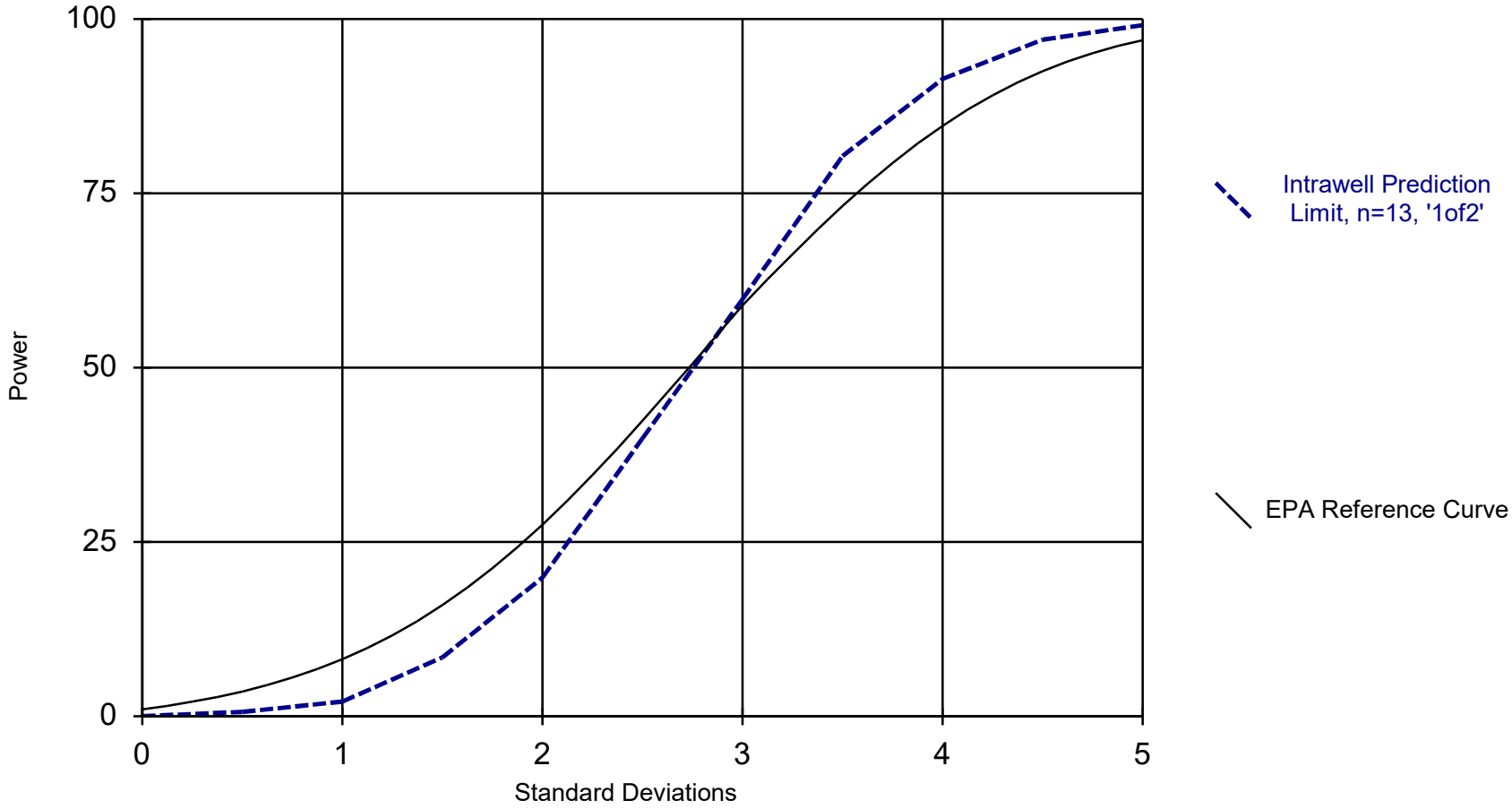
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Gadsden Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Abdul Diane
Groundwater Analyst

Andrew T. Collins
Project Manager

Intrawell Power Curve

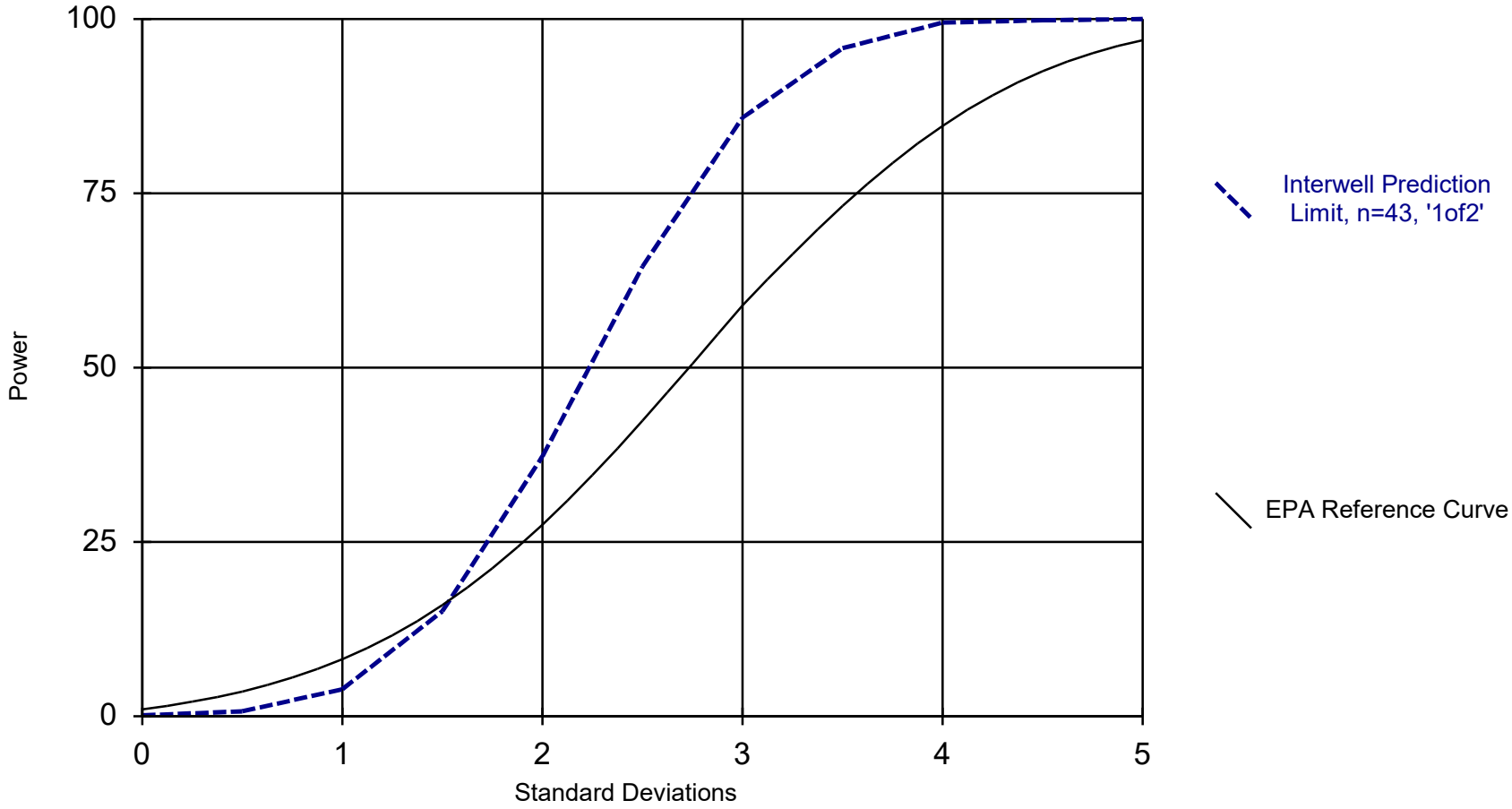


Kappa = 2.711, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 1/13/2022 3:29 PM View: UTL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Interwell Power Curve



Kappa = 2.163, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 1/13/2022 8:24 PM View: UTL

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

100% Non-Detects

Analysis Run 1/11/2022 3:47 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Antimony (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2

Arsenic (mg/L)
GSD-AP-MW-12, GSD-AP-MW-6, GSD-AP-PZ-1, GSD-AP-PZ-6

Beryllium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Cadmium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-6

Fluoride (mg/L)
GSD-AP-PZ-2

Lead (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1

Lithium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Mercury (mg/L)
GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Molybdenum (mg/L)
GSD-AP-MW-1, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-6, GSD-AP-PZ-5, GSD-AP-PZ-6

Selenium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Thallium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Appendix III Welch's t-test/Mann-Whitney - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/16/2021, 2:09 PM

Constituent	Well	Calc.	0.01	Method
Fluoride (mg/L)	**GSD-AP-MW-1**	**2.958**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-1**	**-2.858**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-11**	**-2.642**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-3**	**-2.639**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-7**	**-2.855**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-8**	**-3.001**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-PZ-5**	**-2.708**	**Yes**	**Mann-W**

Appendix III Welch's t-test/Mann-Whitney - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/16/2021, 2:09 PM

Constituent	Well	Calc.	0.01	Method
Fluoride (mg/L)	**GSD-AP-MW-1**	**2.958**	**Yes**	**Mann-W**
Fluoride (mg/L)	GSD-AP-MW-10	1.248	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-11	2.317	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-12	0.6325	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-14 (bg)	-2.005	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-16 (bg)	-1.313	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-17 (bg)	-1.84	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-2	0.07329	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-3	0.3267	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-4	0.0737	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-5	0.6633	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-6	2.495	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-7	0.2217	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-8	-1.982	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-9	1.702	No	Mann-W
Fluoride (mg/L)	GSD-AP-PZ-1	-1.709	No	Mann-W
Fluoride (mg/L)	GSD-AP-PZ-5	2.386	No	Mann-W
Fluoride (mg/L)	GSD-AP-PZ-6	2.451	No	Mann-W
pH (pH)	**GSD-AP-MW-1**	**-2.858**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-10	0.6615	No	Mann-W
pH (pH)	**GSD-AP-MW-11**	**-2.642**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-12	-0.3665	No	Mann-W
pH (pH)	GSD-AP-MW-14 (bg)	-2.436	No	Mann-W
pH (pH)	GSD-AP-MW-16 (bg)	-2.052	No	Mann-W
pH (pH)	GSD-AP-MW-17 (bg)	-1.391	No	Mann-W
pH (pH)	GSD-AP-MW-2	-1.466	No	Mann-W
pH (pH)	**GSD-AP-MW-3**	**-2.639**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-4	0.5872	No	Mann-W
pH (pH)	GSD-AP-MW-5	-0.8894	No	Mann-W
pH (pH)	GSD-AP-MW-6	-2.126	No	Mann-W
pH (pH)	**GSD-AP-MW-7**	**-2.855**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-8**	**-3.001**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-9	-2.014	No	Mann-W
pH (pH)	GSD-AP-PZ-1	-2.569	No	Mann-W
pH (pH)	**GSD-AP-PZ-5**	**-2.708**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-PZ-6	-1.69	No	Mann-W

Appendix III - Upgradient Well Trend Tests - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Upgradient Well Trend Tests - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	48	No	14	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.02049	44	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.001687	-35	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-1.044	-16	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.5887	-13	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.622	25	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.02255	13	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.04562	-7	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-4.795	-10	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	29.67	42	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-1.162	-42	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-10.61	-11	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	26.27	37	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-3.097	-18	-48	No	14	0	n/a	n/a	0.01	NP

Appendix III - Intrawell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	**GSD-AP-MW-10**	**0.1381**	**n/a**	**10/11/2021**	**0.201**	**Yes**	**13**	**0.08731**	**0.01872**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.1122**	**n/a**	**10/12/2021**	**0.134**	**Yes**	**13**	**0.0646**	**0.01756**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	**GSD-AP-MW-5**	**0.08126**	**n/a**	**10/5/2021**	**0.122**	**Yes**	**13**	**0.05878**	**0.008293**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**10/5/2021**	**5.19**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Appendix III - Intrawell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	10/5/2021	0.0601J	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	**GSD-AP-MW-10**	**0.1381**	**n/a**	**10/11/2021**	**0.201**	**Yes**	**13**	**0.08731**	**0.01872**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.1122**	**n/a**	**10/12/2021**	**0.134**	**Yes**	**13**	**0.0646**	**0.01756**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	GSD-AP-MW-12	0.1	n/a	10/5/2021	0.1ND	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	10/12/2021	0.1ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.16	n/a	10/6/2021	0.1ND	No	14	n/a	n/a	50	n/a	n/a	0.008612	NP Intra (normality) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	10/6/2021	0.175	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	10/11/2021	0.283	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1327	n/a	10/5/2021	0.1ND	No	14	0.07516	0.0217	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	10/5/2021	0.214	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	**GSD-AP-MW-5**	**0.08126**	**n/a**	**10/5/2021**	**0.122**	**Yes**	**13**	**0.05878**	**0.008293**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	GSD-AP-MW-6	0.08914	n/a	10/5/2021	0.1ND	No	13	0.05192	0.01373	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-7	0.109	n/a	10/5/2021	0.0933J	No	13	0.0755	0.01236	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-8	0.149	n/a	10/12/2021	0.123	No	13	0.09544	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1665	n/a	10/12/2021	0.147	No	13	0.01415	0.005005	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1606	n/a	10/5/2021	0.1ND	No	13	0.1071	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.1	n/a	10/12/2021	0.1ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.1	n/a	10/12/2021	0.1ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	10/5/2021	5.79	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	10/11/2021	6.72	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-11	7.012	6.206	10/12/2021	6.66	No	13	6.609	0.1486	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**10/5/2021**	**5.19**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-14	4.1	3.25	10/12/2021	4.04	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	10/6/2021	4.16	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	10/6/2021	7.92	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-2	6.801	6.273	10/11/2021	6.59	No	13	6.537	0.09742	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-3	6.88	5.224	10/5/2021	5.76	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	10/5/2021	6.58	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-5	6.352	5.982	10/5/2021	6.24	No	13	6.167	0.06836	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-6	6.703	5.385	10/5/2021	5.74	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-7	6.847	5.694	10/5/2021	6.06	No	13	6.271	0.2126	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-8	7.032	6.084	10/12/2021	6.61	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	10/12/2021	6.9	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	10/5/2021	6.46	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	10/12/2021	5.33	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-6	5.699	5.348	10/12/2021	5.41	No	13	5.523	0.06473	0	None	No	0.0002508	Param Intra 1 of 2

Appendix III - Prediction Limit Exceedances Trend Test - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06242**	**-61**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-3**	**0.05252**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.056**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.069**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-18.36**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-11**	**4.022**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-2**	**-14.19**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-11.11**	**-67**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.7197**	**-92**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.01846**	**57**	**48**	**Yes**	**14**	**21.43**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.5008**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-81.47**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**22.44**	**49**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**-63.87**	**-63**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-43.33**	**-73**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Prediction Limit Exceedances Trend Test - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06242**	**-61**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-11	0.01128	44	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	48	No	14	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.02049	44	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.001687	-35	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-3**	**0.05252**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.056**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.069**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-18.36**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	0.3552	11	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**4.022**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	2.155	15	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-1.044	-16	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.5887	-13	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.622	25	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-14.19**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-11.11**	**-67**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-5	-2.198	-33	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	-0.8321	-11	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.7715	11	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	-0.02609	-6	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	0.02804	3	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	-0.05489	-6	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	0.06337	13	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.02255	13	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.04562	-7	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.7197**	**-92**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	0.183	23	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.3869	-44	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-6	-0.2376	-40	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-7	-0.5316	-44	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.1905	26	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.2026	27	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-10	0.01072	41	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.01846**	**57**	**48**	**Yes**	**14**	**21.43**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GSD-AP-MW-14 (bg)	-0.04431	-47	-48	No	14	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-16 (bg)	0	-33	-53	No	15	53.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-17 (bg)	-0.009217	-44	-48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-5	0.004584	33	48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-12	-0.04154	-18	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-14 (bg)	-0.01834	-18	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.5008**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.09143	-10	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-1	-1.272	-2	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-4.795	-10	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	29.67	42	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-1.162	-42	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-3	0.8391	4	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-81.47**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**22.44**	**49**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	0	0	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-10.61	-11	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	26.27	37	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-3.097	-18	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**-63.87**	**-63**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-43.33**	**-73**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00101	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.056	0.056
Combined Radium-226/228	pCi/L	2.01	5
Fluoride	mg/L	0.23	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

Appendix IV - Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.8867**	**0.4825**	**0.01**	**Yes**	**8**	**0.1907**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01443**	**0.01112**	**0.01**	**Yes**	**8**	**0.001561**	**0**	**No**	**0.01**	**Param.**

Appendix IV - Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-PZ-5	0.00114	0.00102	0.006	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-6	0.00181	0.00102	0.006	No	8	0.0002793	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.004635	0.003167	0.01	No	8	0.0006925	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004268	0.002367	0.01	No	8	0.0008972	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002875	0.002467	0.01	No	8	0.0001991	0	x^2	0.01	Param.
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.8867**	**0.4825**	**0.01**	**Yes**	**8**	**0.1907**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.00021	0.0002	0.01	No	8	0.000003536	75	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01443**	**0.01112**	**0.01**	**Yes**	**8**	**0.001561**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.0002	0.0000817	0.01	No	8	0.00004545	75	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.0002	0.00007	0.01	No	8	0.00004596	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003237	0.002685	0.01	No	8	0.0002603	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.00118	0.0002	0.01	No	8	0.0004166	50	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-2	0.0002	0.0000826	0.01	No	4	0.00006571	50	No	0.0625	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.0002	0.0000808	0.01	No	8	0.00004214	87.5	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.04302	0.03178	2	No	8	0.005302	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3583	0.272	2	No	8	0.0407	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.331	0.165	2	No	8	0.07117	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-MW-12	0.05203	0.03202	2	No	8	0.009438	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.07826	0.04999	2	No	8	0.01334	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.0545	0.0344	2	No	8	0.00667	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-MW-4	0.208	0.1663	2	No	8	0.01968	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2509	0.2179	2	No	8	0.01556	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07455	0.0586	2	No	8	0.007523	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08968	0.06367	2	No	8	0.01227	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.2499	0.1821	2	No	8	0.03199	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1978	0.1452	2	No	8	0.02484	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.09461	0.05414	2	No	8	0.01909	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1828	0.006264	2	No	4	0.03889	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.126	0.0494	2	No	8	0.03219	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.0311	0.02888	2	No	8	0.001049	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.0002	0.0001	0.005	No	8	0.00004583	75	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-12	0.00069	0.0004022	0.005	No	8	0.0001357	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.0002	0.0000688	0.005	No	8	0.00004639	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.000438	0.0002	0.005	No	8	0.00009918	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-7	0.0002	0.000097	0.005	No	8	0.00003642	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.0002	0.0000832	0.005	No	8	0.0000413	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.0002	0.00008	0.005	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.00102	0.00023	0.1	No	8	0.0003342	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-10	0.00102	0.00028	0.1	No	8	0.0003269	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-11	0.00102	0.00027	0.1	No	8	0.0002981	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-12	0.00102	0.00034	0.1	No	8	0.0002947	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-2	0.00102	0.00047	0.1	No	8	0.0002523	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-3	0.00285	0.00023	0.1	No	8	0.0008008	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-4	0.00102	0.000323	0.1	No	8	0.0002464	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.00102	0.00028	0.1	No	8	0.000317	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-6	0.00102	0.00025	0.1	No	8	0.0003369	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-7	0.00102	0.00025	0.1	No	8	0.000323	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-8	0.00102	0.0003	0.1	No	8	0.0002546	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.00102	0.00031	0.1	No	8	0.0003042	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-1	0.00102	0.00035	0.1	No	8	0.0002899	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-2	0.001027	0.00008704	0.1	No	4	0.0003163	50	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.00102	0.00034	0.1	No	8	0.0002748	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-6	0.00102	0.00031	0.1	No	8	0.0002832	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-1	0.02458	0.0164	0.056	No	8	0.003859	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.00089	0.000203	0.056	No	8	0.0002416	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-11	0.00756	0.000203	0.056	No	8	0.003052	50	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-12	0.005722	0.003605	0.056	No	8	0.0009986	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-2	0.04018	0.02285	0.056	No	8	0.008175	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02557	0.01775	0.056	No	8	0.003689	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.0277	0.0231	0.056	No	8	0.002167	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.00233	0.000203	0.056	No	8	0.0007658	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-6	0.00104	0.000203	0.056	No	8	0.0003829	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-7	0.00102	0.00018	0.056	No	8	0.0002901	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-8	0.003677	0.001444	0.056	No	8	0.001466	25	x^2	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.00113	0.000203	0.056	No	8	0.0004069	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.000203	0.056	No	8	0.00008379	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.008085	0.00006002	0.056	No	4	0.001767	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00227	0.00008	0.056	No	8	0.0009513	50	No	0.004	NP (normality)

Appendix IV - Confidence Intervals - All Results

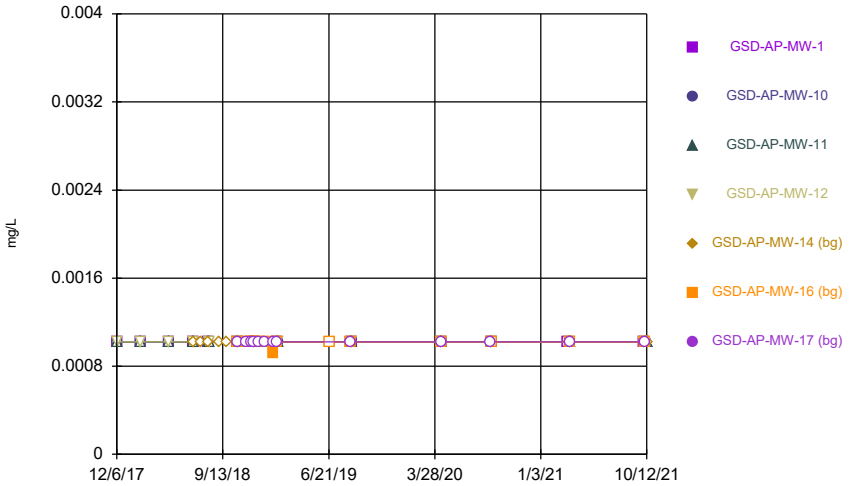
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-PZ-6	0.000203	0.000108	0.056	No	8	0.00003756	75	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	0.9405	0.3485	5	No	8	0.2792	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	2.742	0.0046	5	No	8	2.17	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.318	0.7526	5	No	8	0.2668	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.226	0.1273	5	No	8	0.5182	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.54	0.2978	5	No	8	0.6692	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.65	0.1921	5	No	8	0.9789	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.285	0.1217	5	No	8	0.5489	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.235	0.3811	5	No	8	0.4027	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	1.36	-0.086	5	No	8	0.4386	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	0.9326	0.07467	5	No	8	0.4047	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.7288	0.2854	5	No	8	0.2092	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.146	0.1025	5	No	8	0.4922	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	2.07	-0.129	5	No	8	0.678	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	1.673	-0.496	5	No	4	0.4778	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.7655	0.172	5	No	8	0.28	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.116	0.003433	5	No	8	0.4985	0	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.1	0.04	4	No	8	0.026	62.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.1425	0.07281	4	No	8	0.04055	0	ln(x)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-11	0.1109	0.06956	4	No	8	0.01912	37.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-12	0.1	0.1	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-2	0.2781	0.1802	4	No	8	0.04616	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.1	0.0592	4	No	8	0.01915	62.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2536	0.2094	4	No	8	0.02083	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.0889	0.04612	4	No	8	0.02389	0	ln(x)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-6	0.1	0.0581	4	No	8	0.0153	75	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-7	0.08844	0.06404	4	No	8	0.01568	37.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-8	0.1098	0.06858	4	No	8	0.01946	12.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.148	0.08501	4	No	8	0.03587	12.5	x^2	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1038	0.07601	4	No	8	0.0133	25	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-5	0.1	0.1	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-PZ-6	0.1	0.1	4	No	8	0	100	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-MW-2	0.0002	0.00009	0.015	No	8	0.00003889	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.0002	0.00012	0.015	No	4	0.00003873	50	No	0.0625	NP (normality)
Lead (mg/L)	GSD-AP-PZ-5	0.0002	0.00013	0.015	No	8	0.00002475	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.0002	0.0000835	0.015	No	8	0.00004652	75	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.06589	0.02824	0.04	No	8	0.01776	0	No	0.01	Param.
Mercury (mg/L)	GSD-AP-MW-10	0.0005	0.000302	0.002	No	8	0.00007	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-7	0.0005	0.00034	0.002	No	8	0.00005657	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-8	0.0005	0.000284	0.002	No	8	0.00007637	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.00045	0.000203	0.1	No	8	0.00008728	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-11	0.000203	0.000124	0.1	No	8	0.00003133	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.02559	0.01494	0.1	No	8	0.005024	0	No	0.01	Param.
Molybdenum (mg/L)	GSD-AP-MW-4	0.00118	0.000203	0.1	No	8	0.0004365	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-5	0.000203	0.00015	0.1	No	8	0.00001874	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.000203	0.0001	0.1	No	8	0.00003642	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.000357	0.000203	0.1	No	8	0.0000635	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-9	0.00027	0.00018	0.1	No	8	0.00002612	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.000203	0.00007	0.1	No	8	0.00005544	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.00028	0.000203	0.1	No	4	0.0000385	75	No	0.0625	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.0002	0.000112	0.002	No	8	0.00003111	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.0003549	0.0002241	0.002	No	8	0.00006169	12.5	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.0002	0.000121	0.002	No	8	0.00003257	75	No	0.004	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

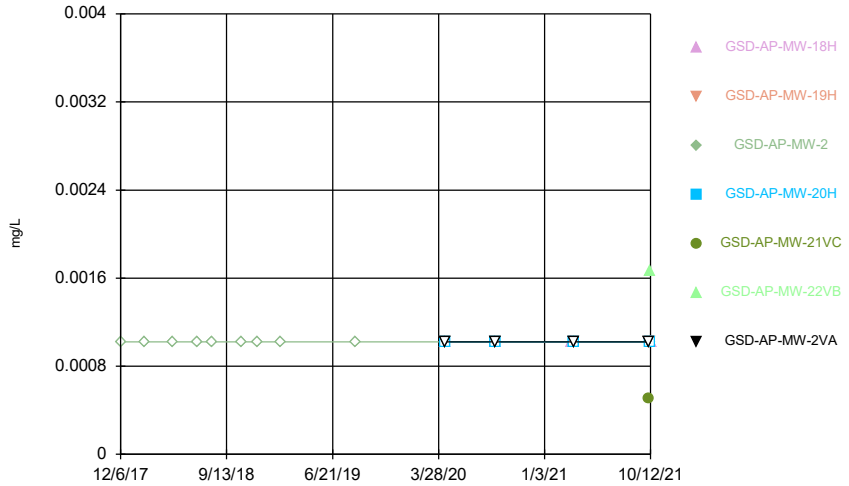
Time Series



Constituent: Antimony Analysis Run 1/13/2022 1:45 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

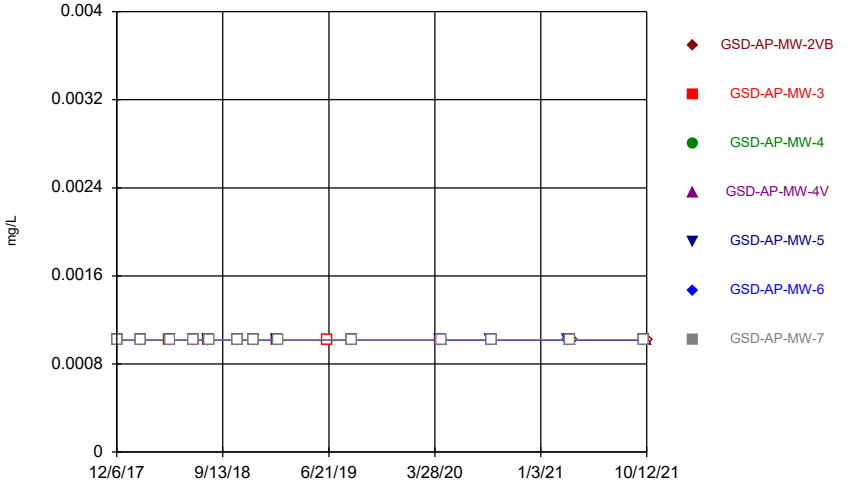
Time Series



Constituent: Antimony Analysis Run 1/13/2022 1:45 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

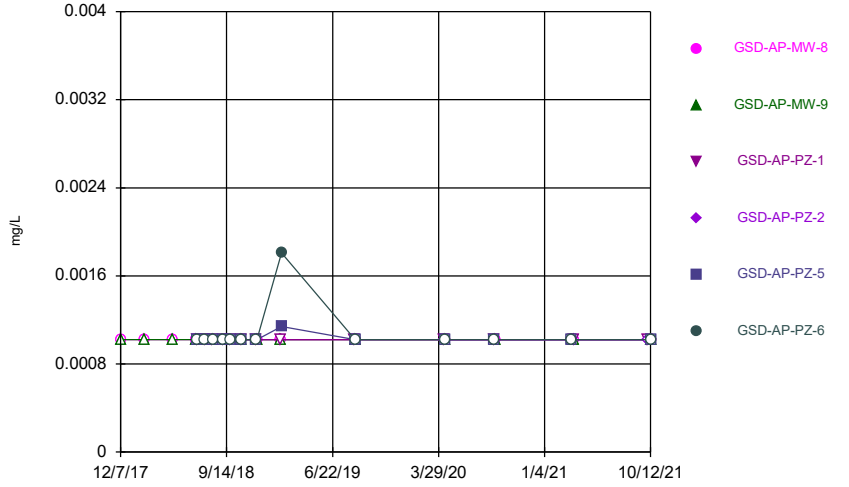
Time Series



Constituent: Antimony Analysis Run 1/13/2022 1:45 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

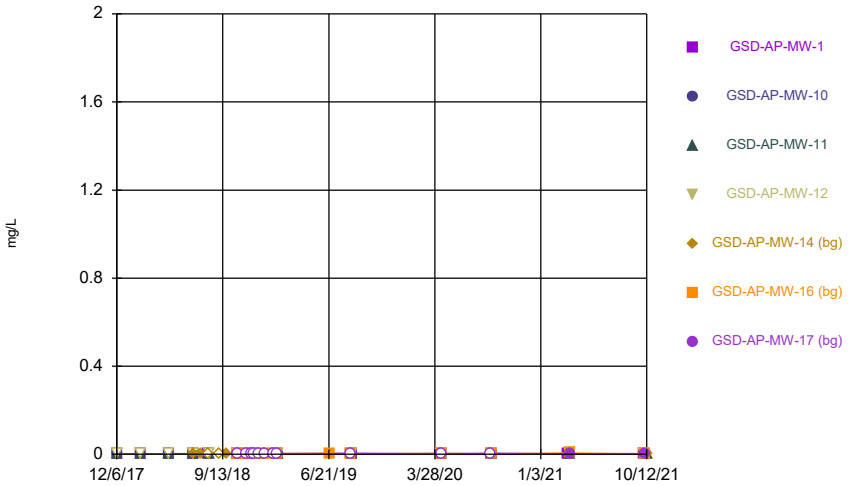
Time Series



Constituent: Antimony Analysis Run 1/13/2022 1:45 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

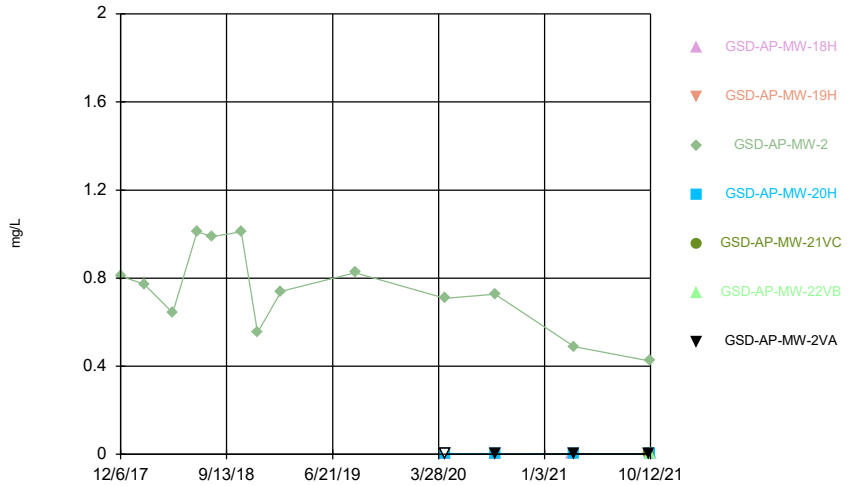
Time Series



Constituent: Arsenic Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

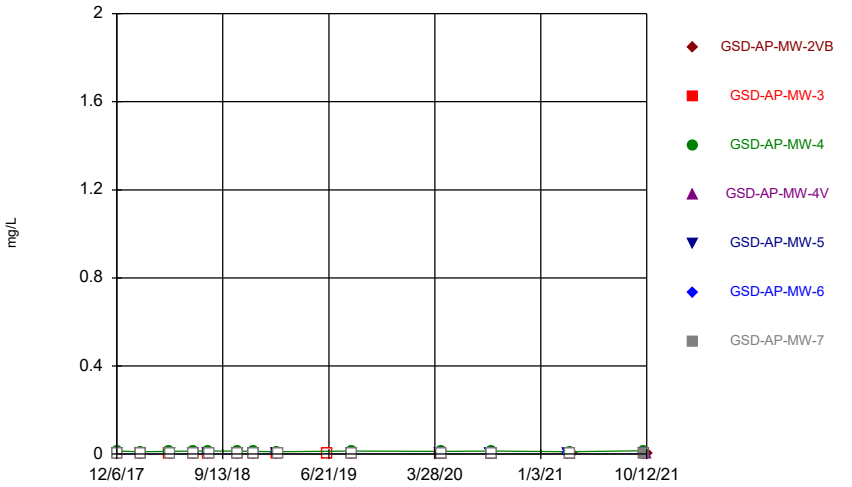
Time Series



Constituent: Arsenic Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Arsenic Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

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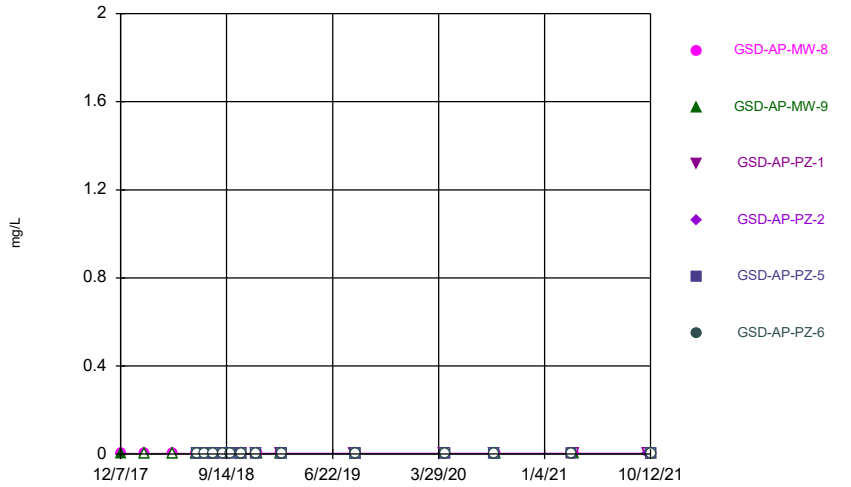
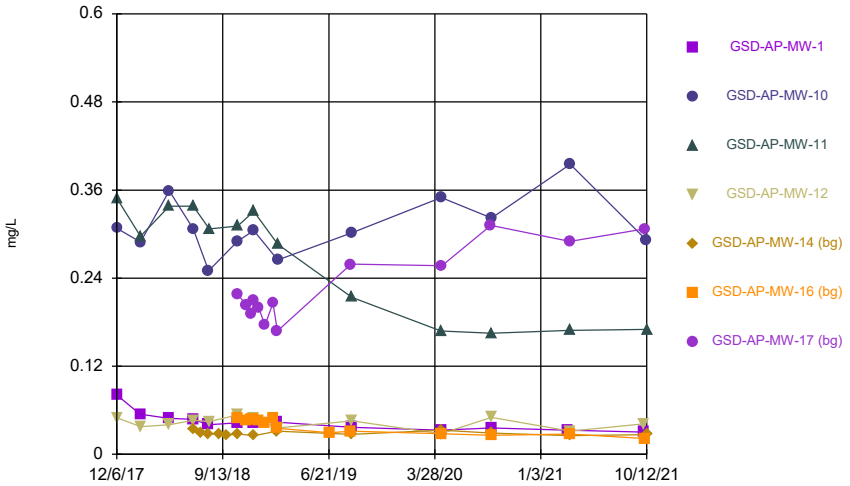


Constituent: Arsenic Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

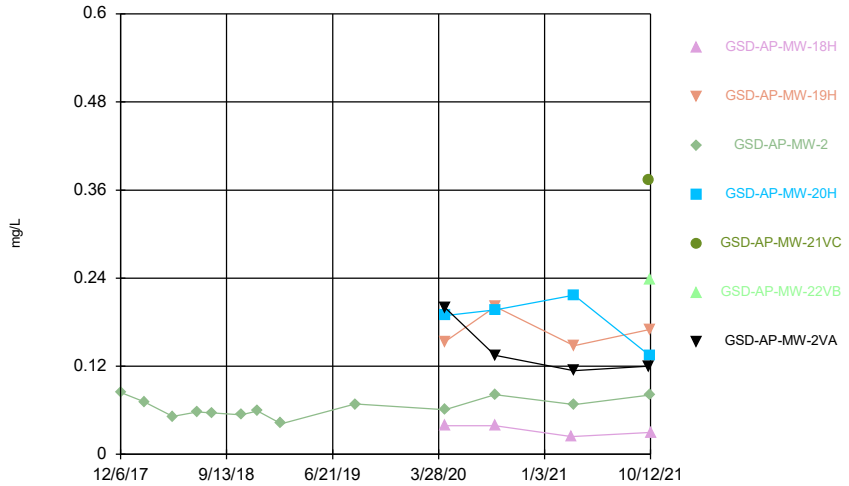


Constituent: Barium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

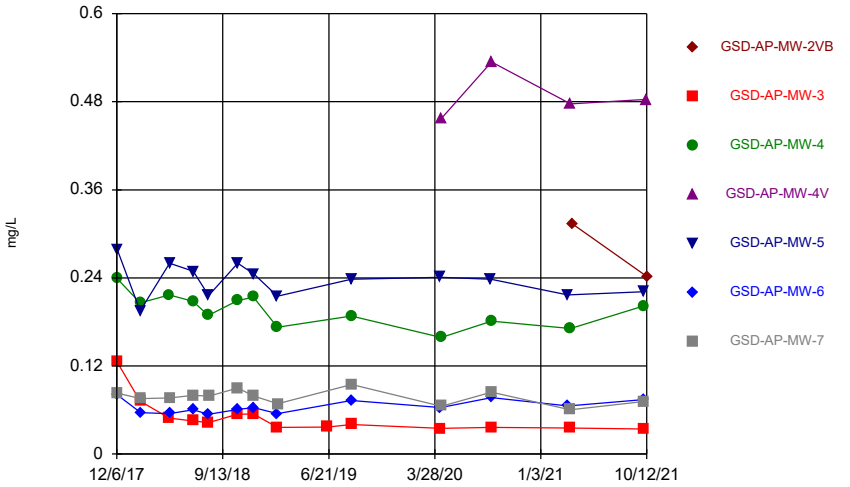


Constituent: Barium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

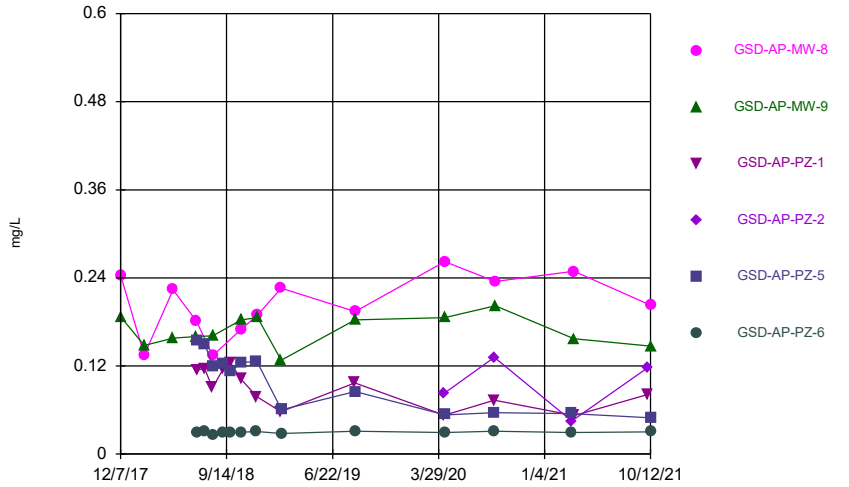


Constituent: Barium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

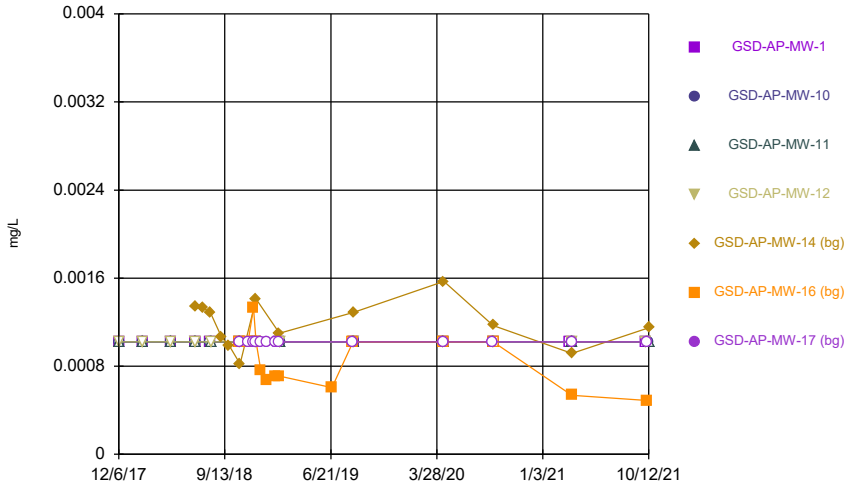


Constituent: Barium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

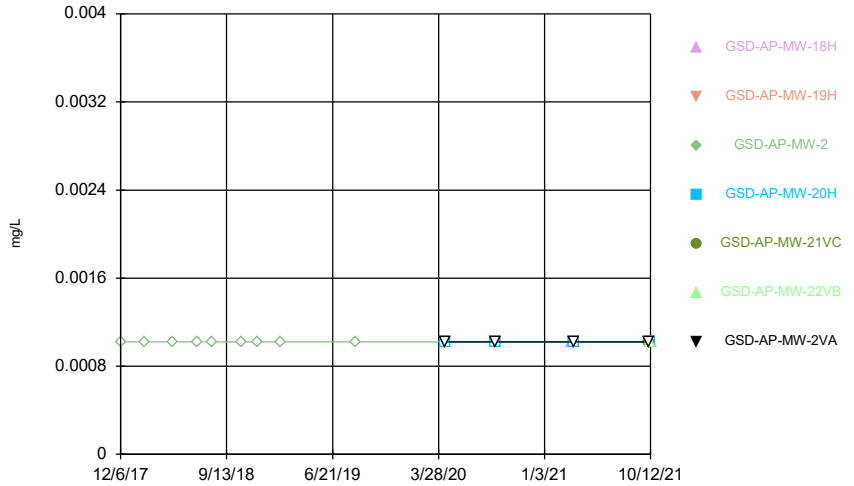
Time Series



Constituent: Beryllium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

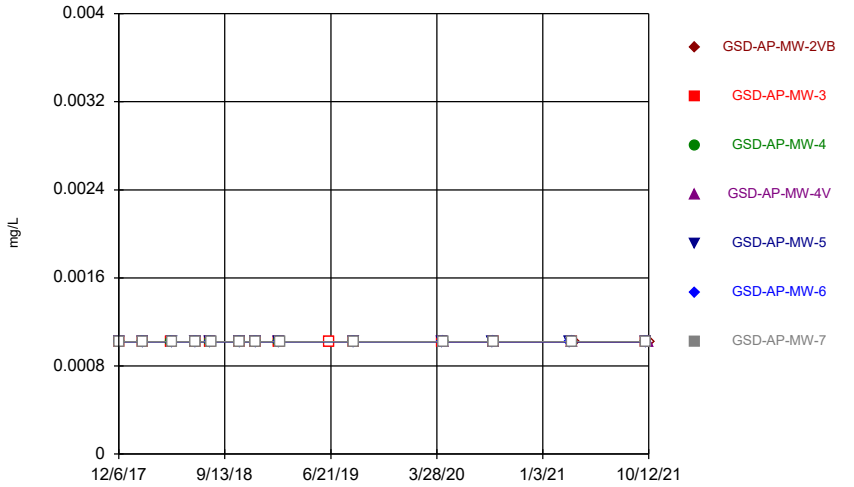
Time Series



Constituent: Beryllium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

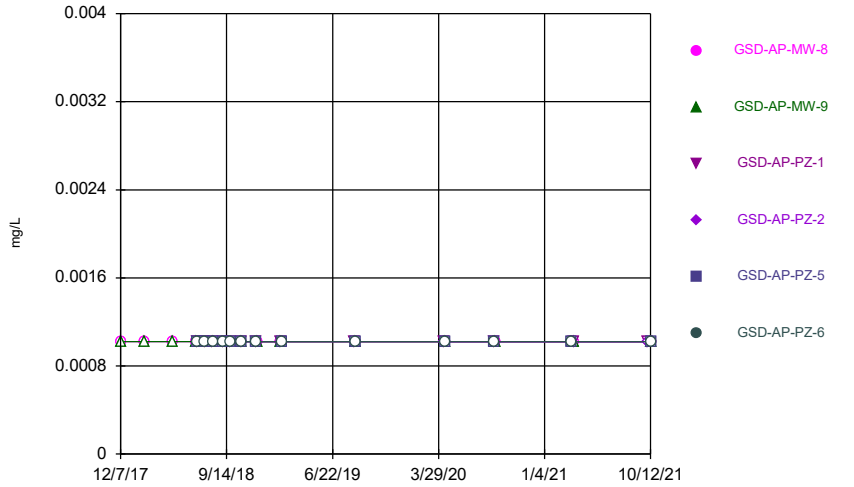
Time Series



Constituent: Beryllium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

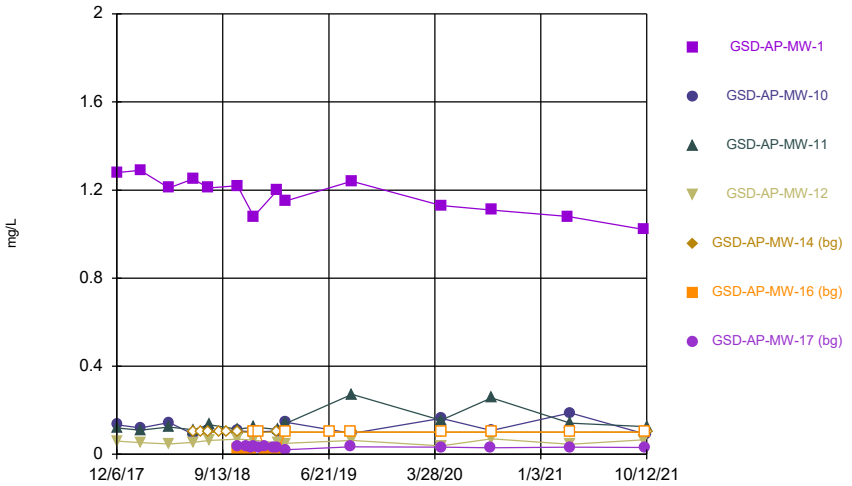
Time Series



Constituent: Beryllium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

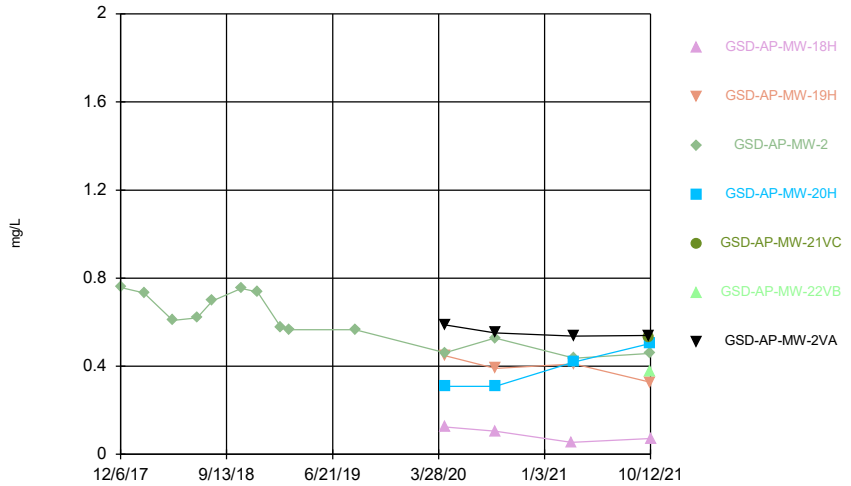
Time Series



Constituent: Boron Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

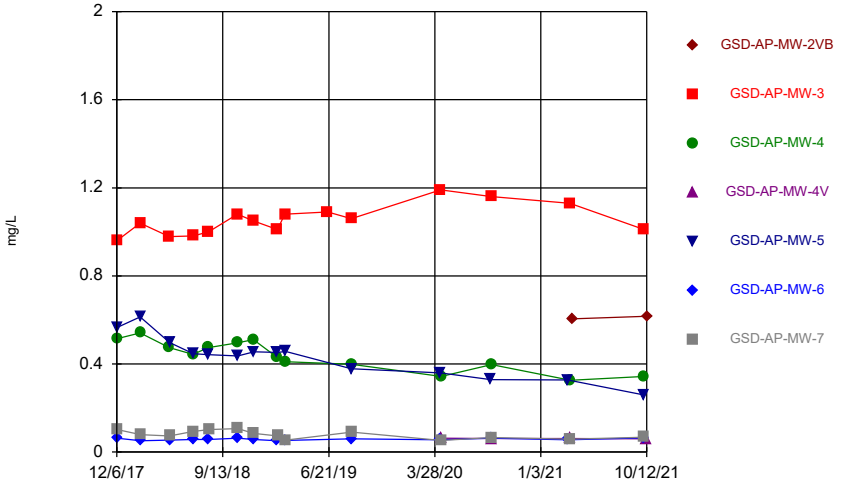
Time Series



Constituent: Boron Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series



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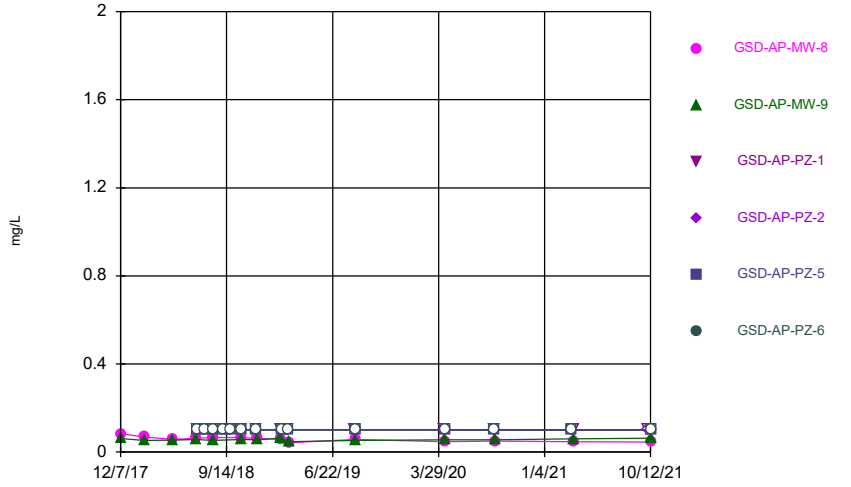
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

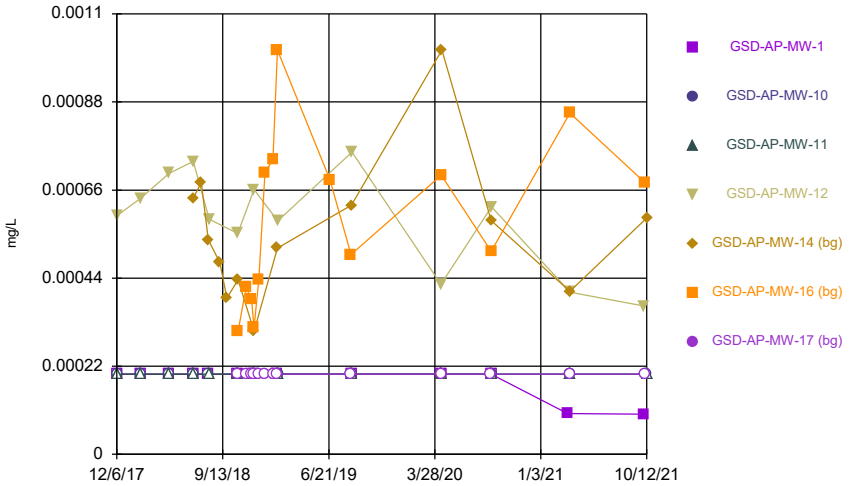
Time Series



Constituent: Boron Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Time Series



Constituent: Cadmium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

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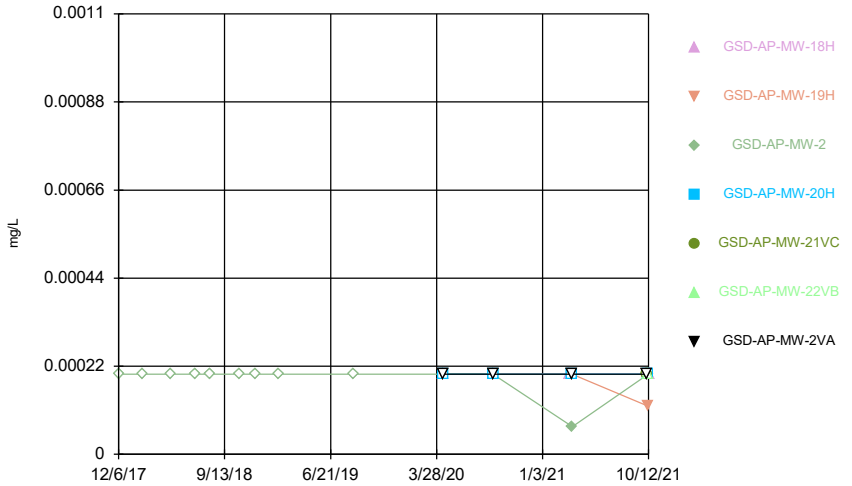
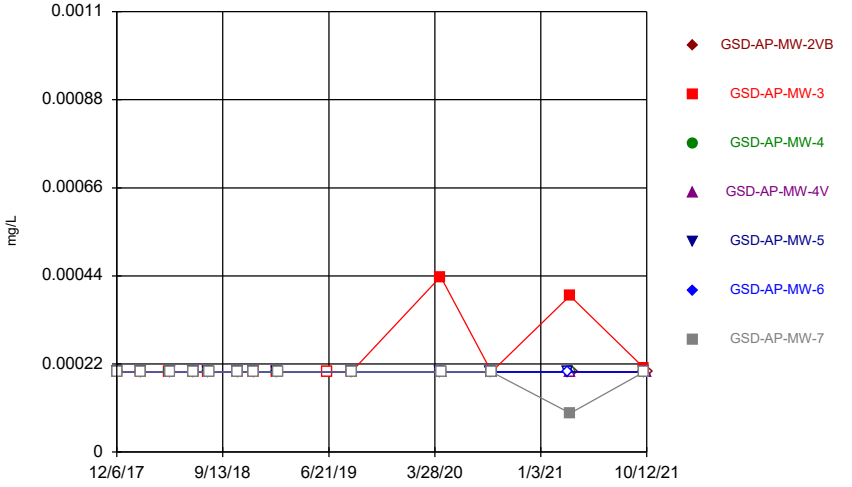


Constituent: Cadmium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

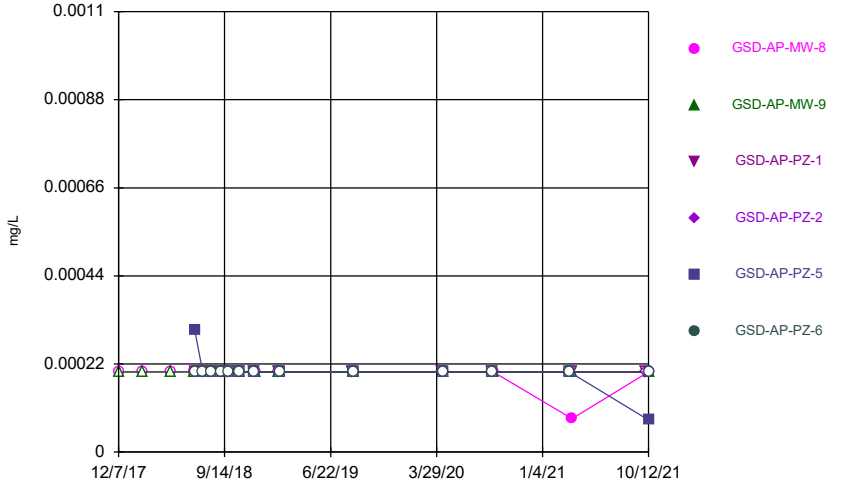
Time Series



Constituent: Cadmium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

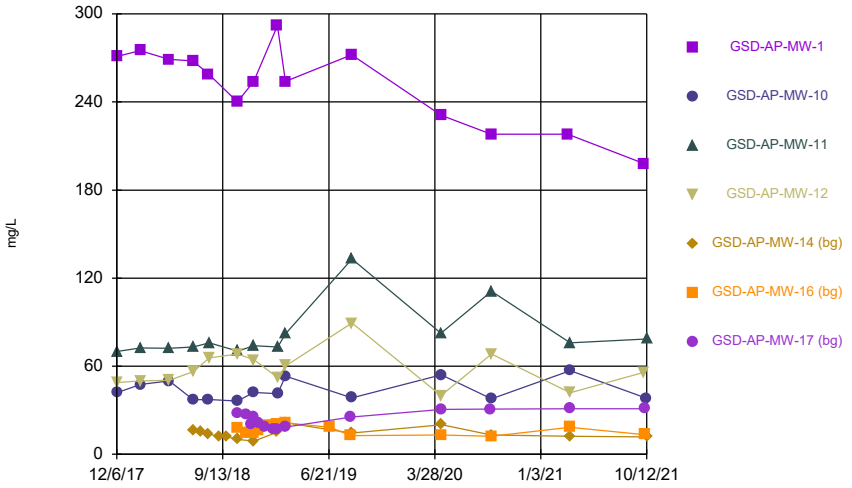
Time Series



Constituent: Cadmium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

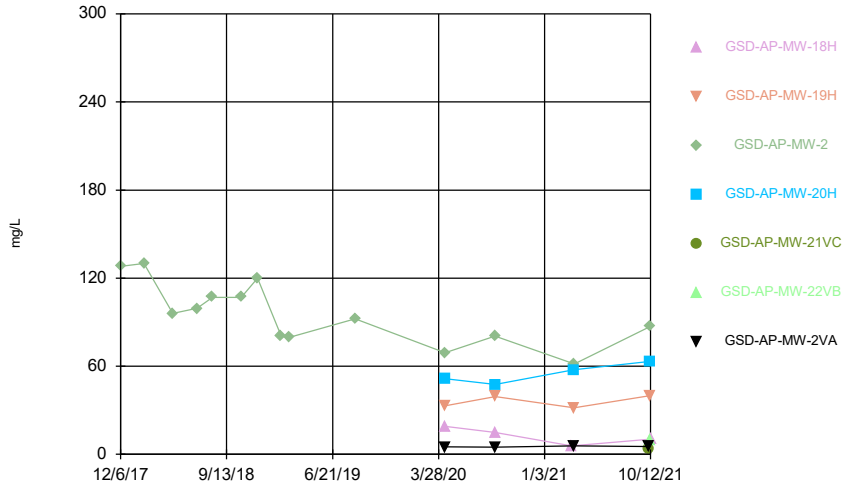


Constituent: Calcium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

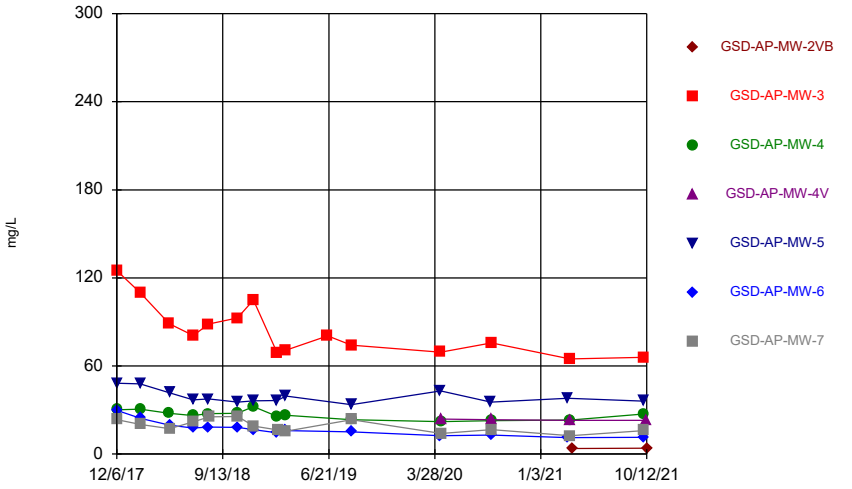


Constituent: Calcium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

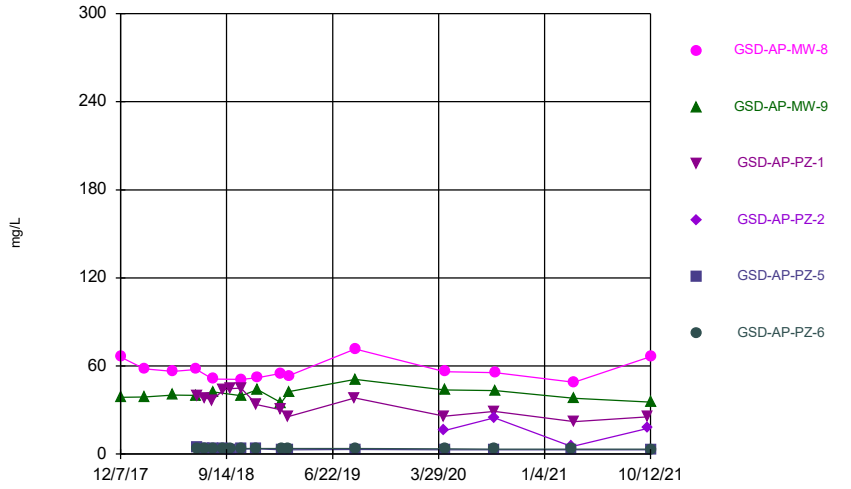


Constituent: Calcium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

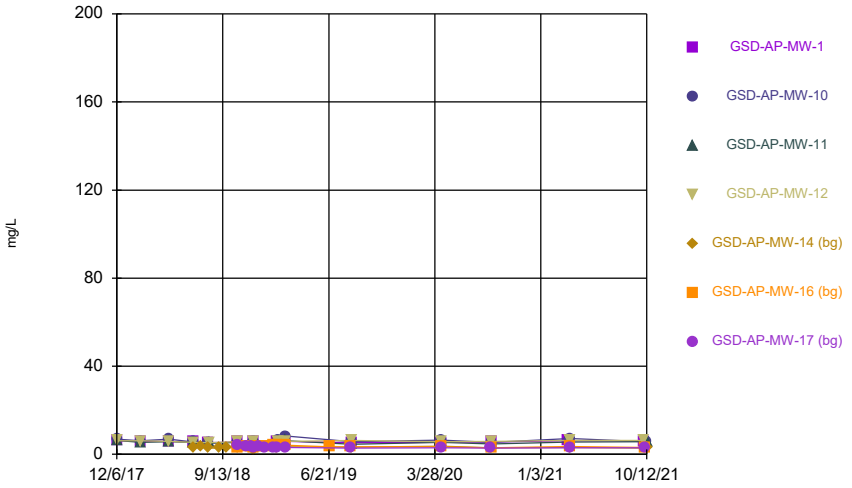


Constituent: Calcium Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

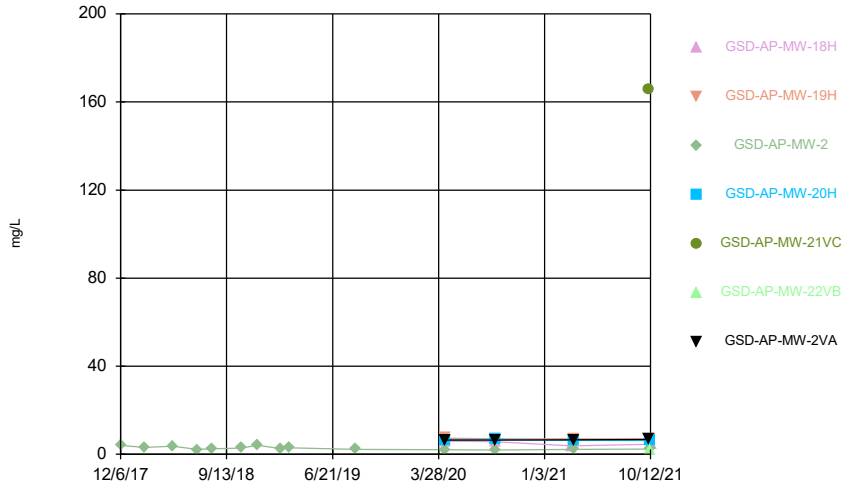


Constituent: Chloride Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

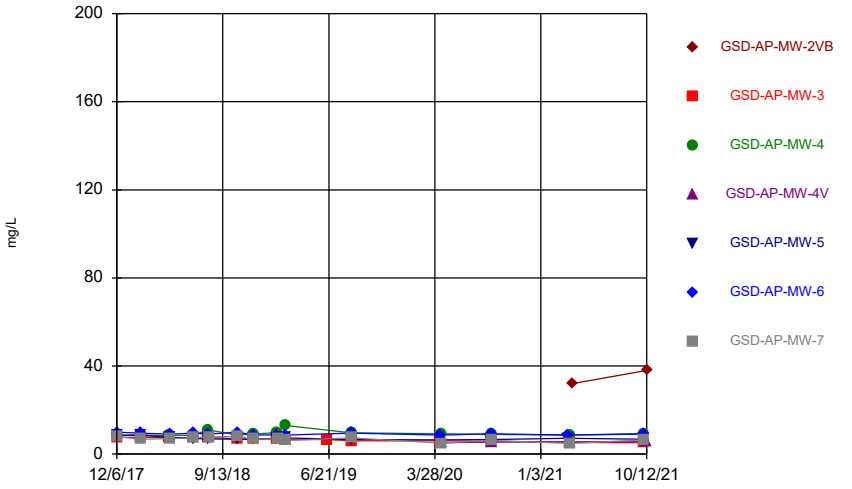


Constituent: Chloride Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

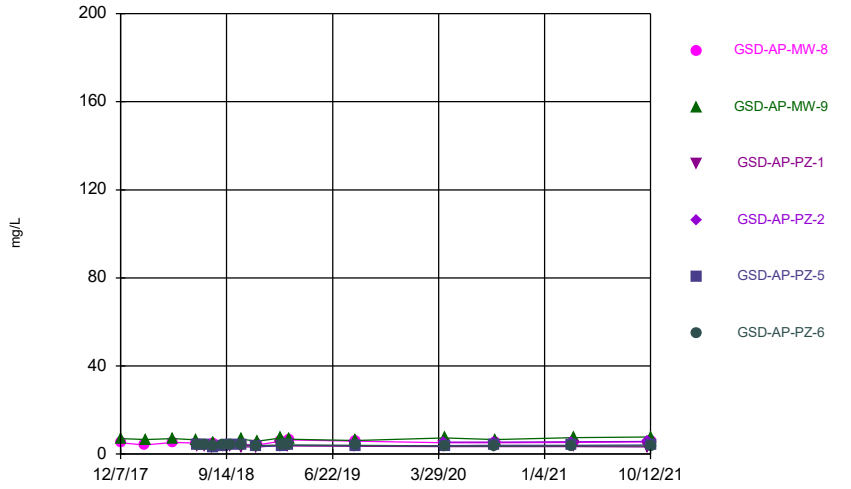


Constituent: Chloride Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

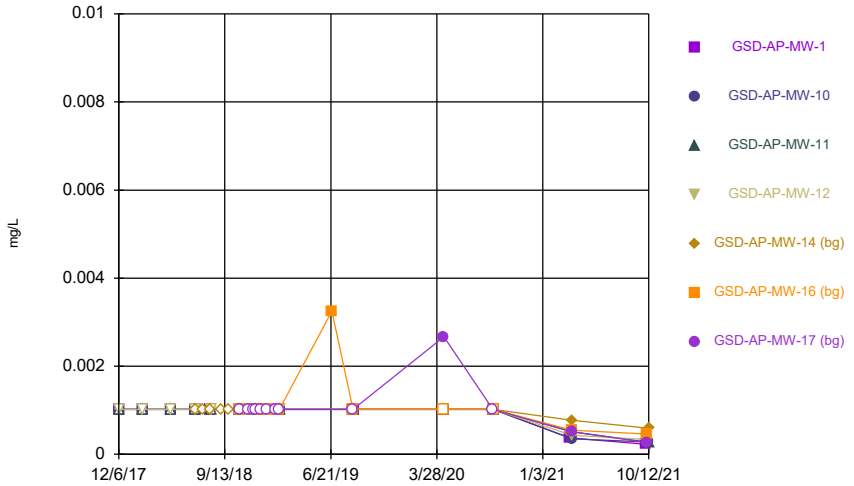


Constituent: Chloride Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

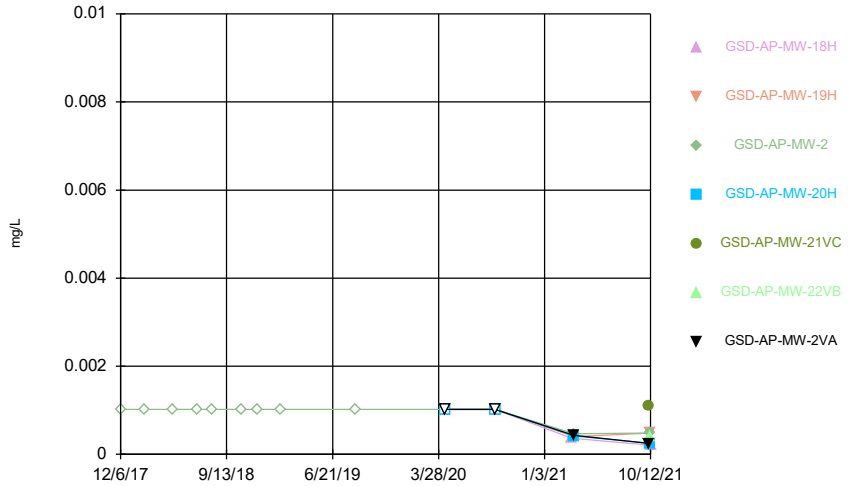
Time Series



Constituent: Chromium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

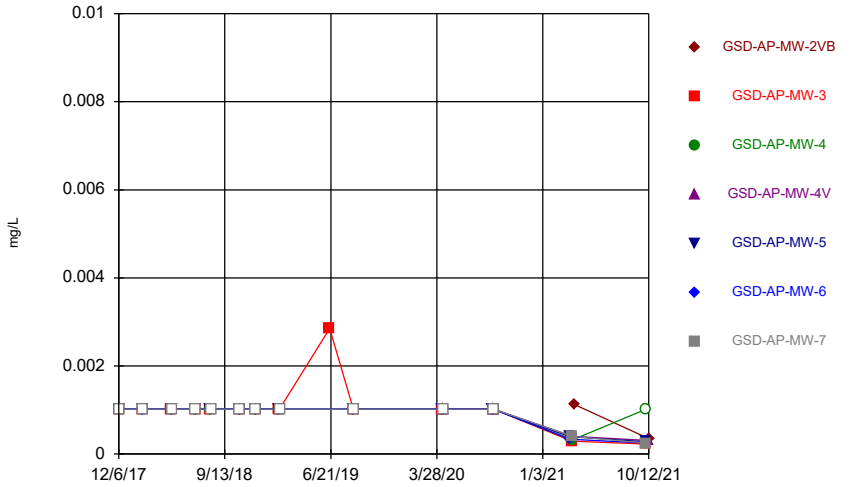
Time Series



Constituent: Chromium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

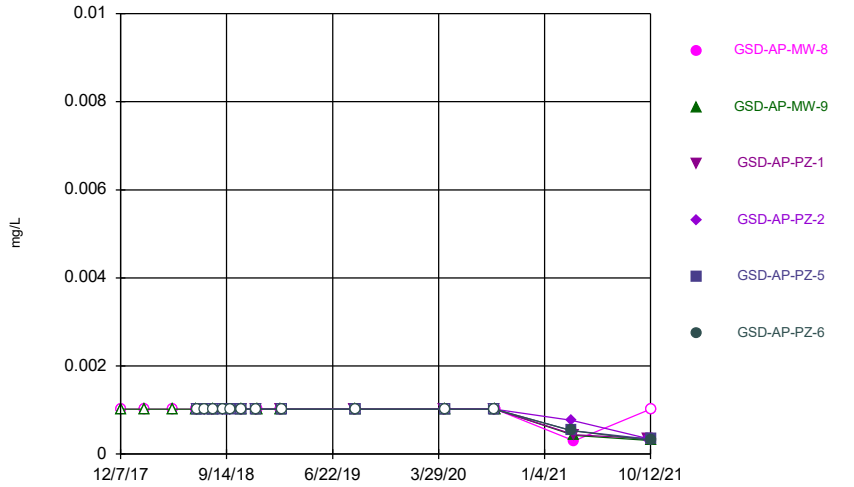
Time Series



Constituent: Chromium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

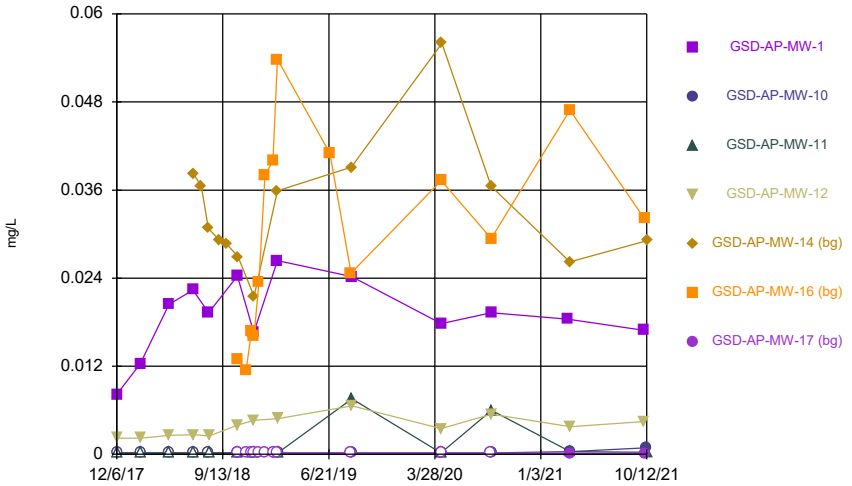
Time Series



Constituent: Chromium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

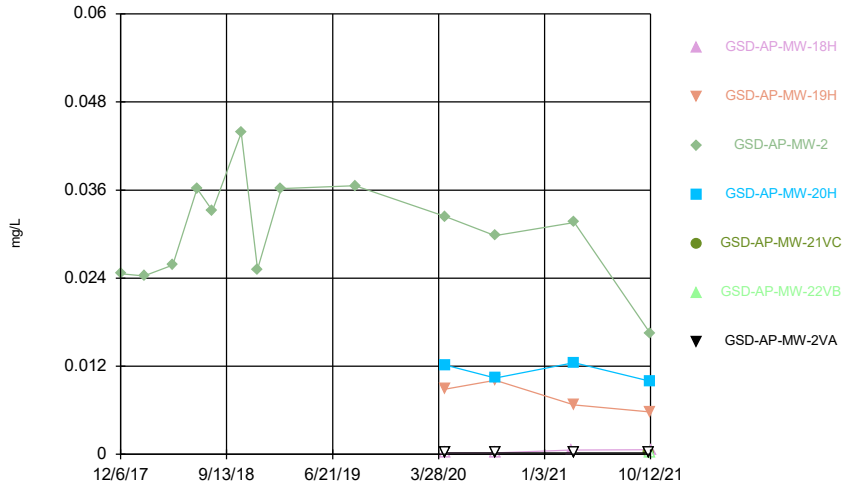
Time Series



Constituent: Cobalt Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

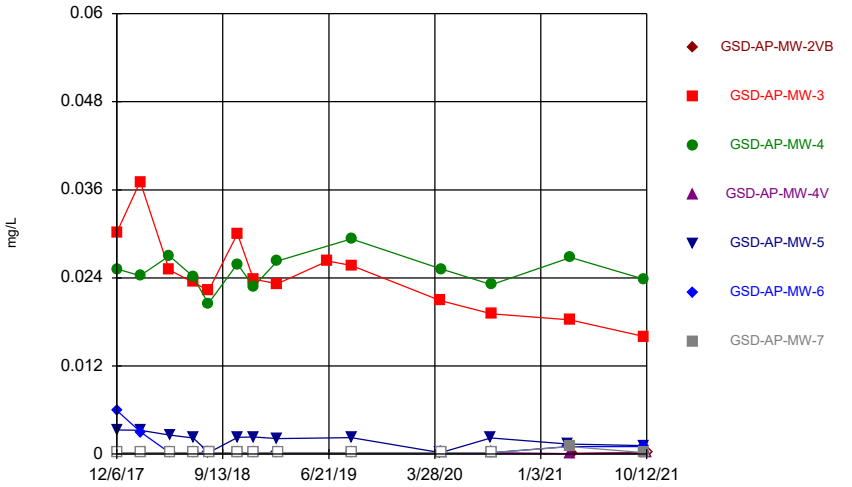
Time Series



Constituent: Cobalt Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

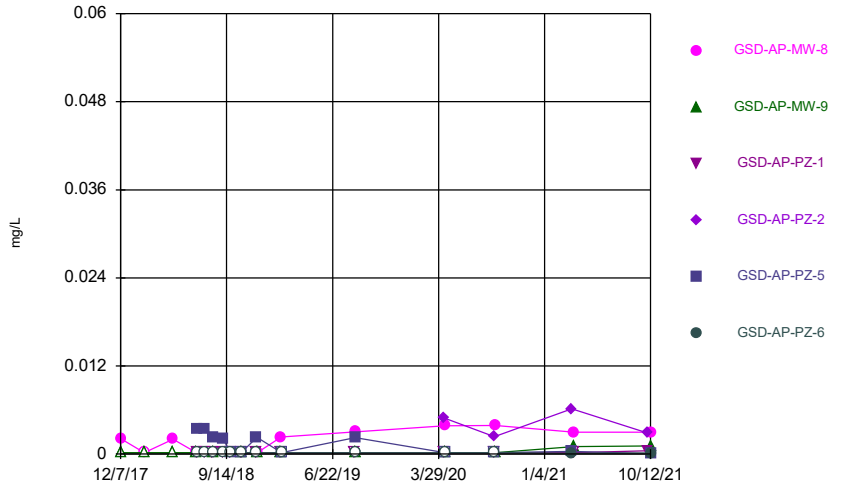
Time Series



Constituent: Cobalt Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

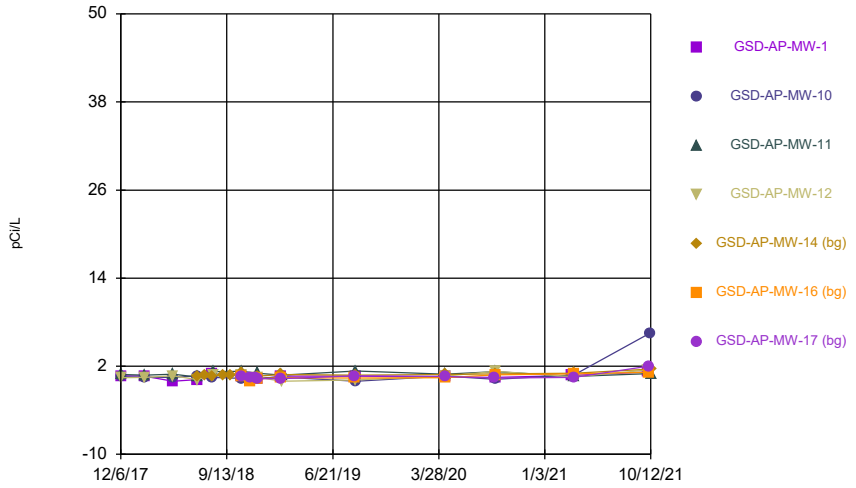
Time Series



Constituent: Cobalt Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

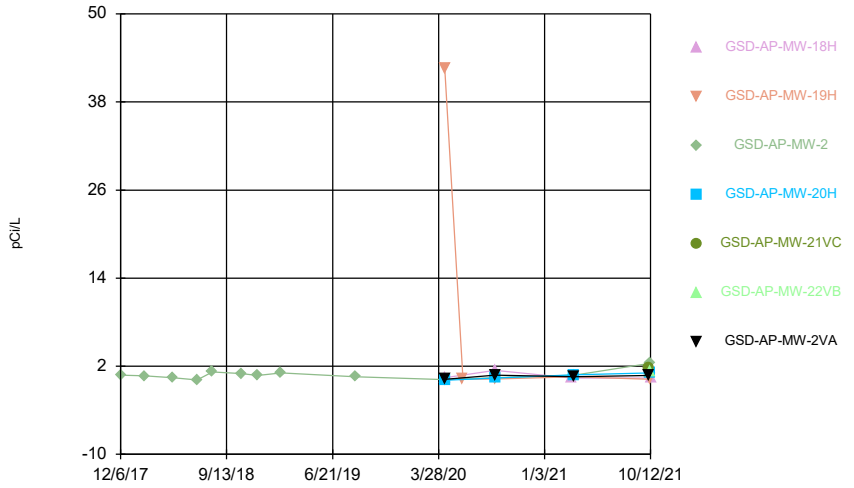
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

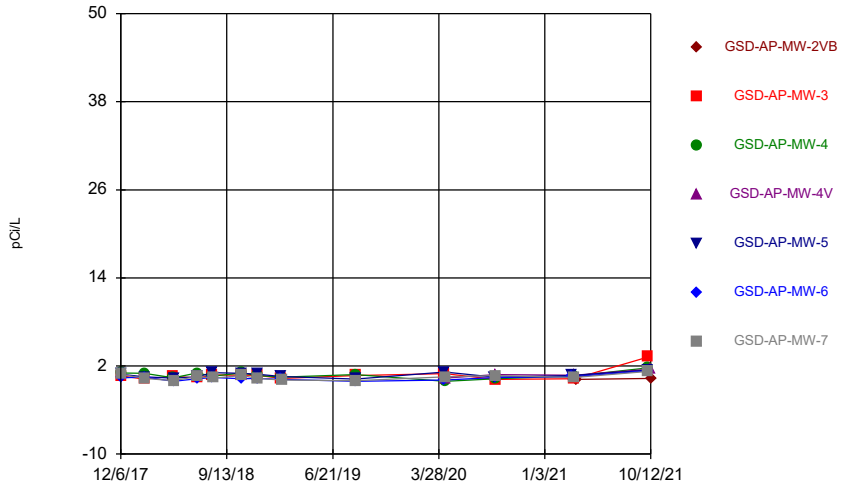
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

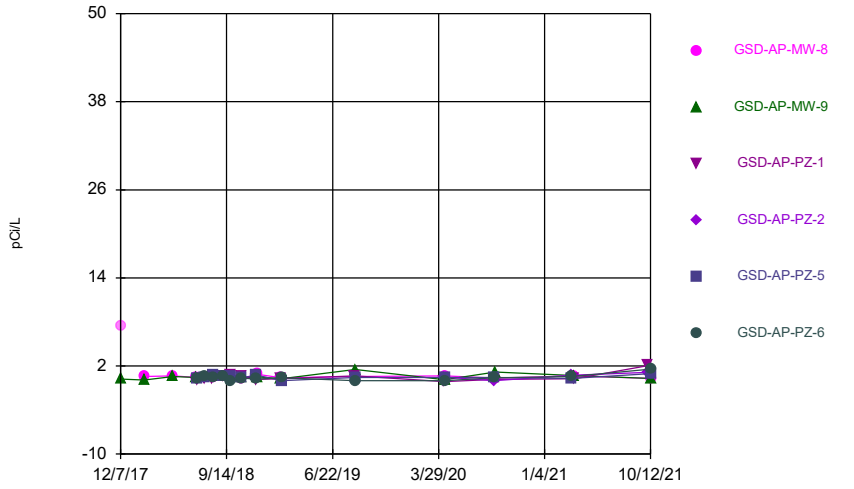
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

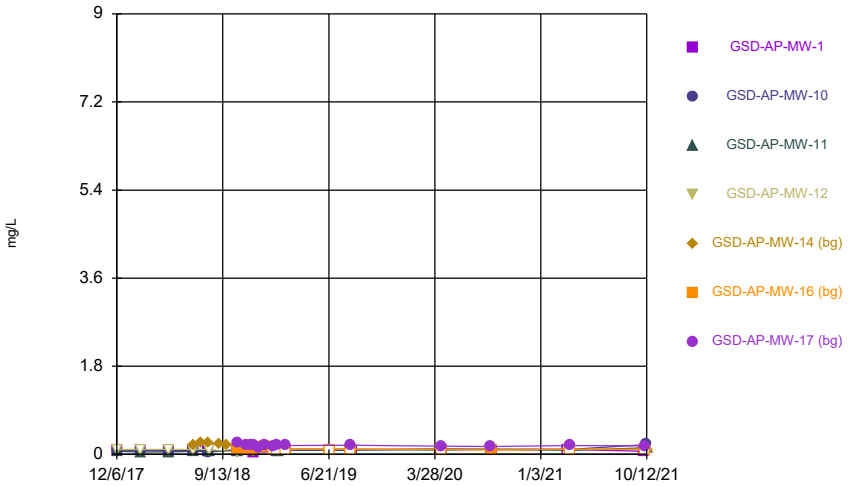
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

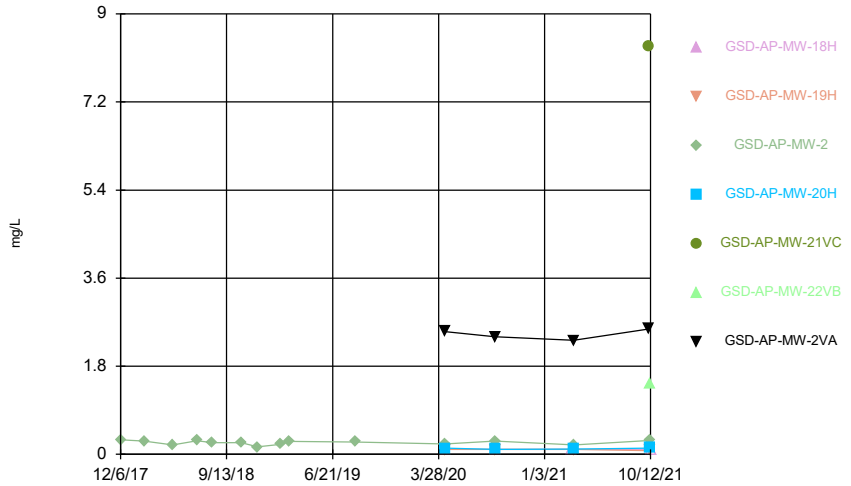
Time Series



Constituent: Fluoride Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

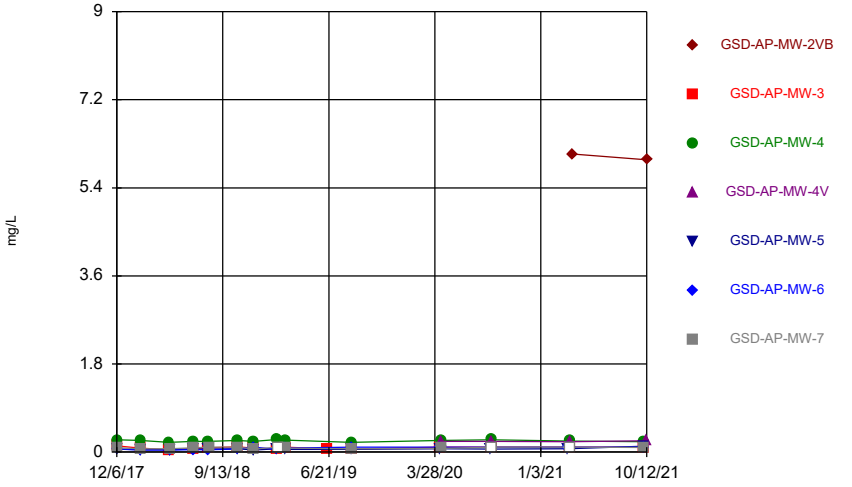
Time Series



Constituent: Fluoride Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

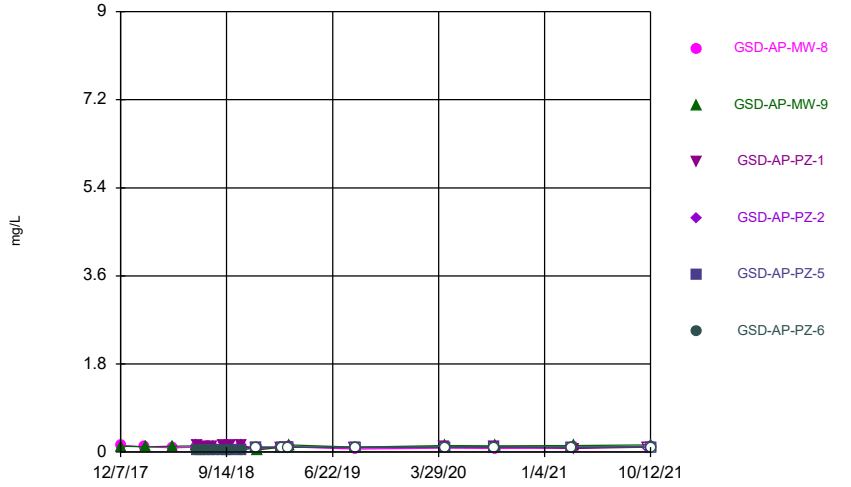
Time Series



Constituent: Fluoride Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

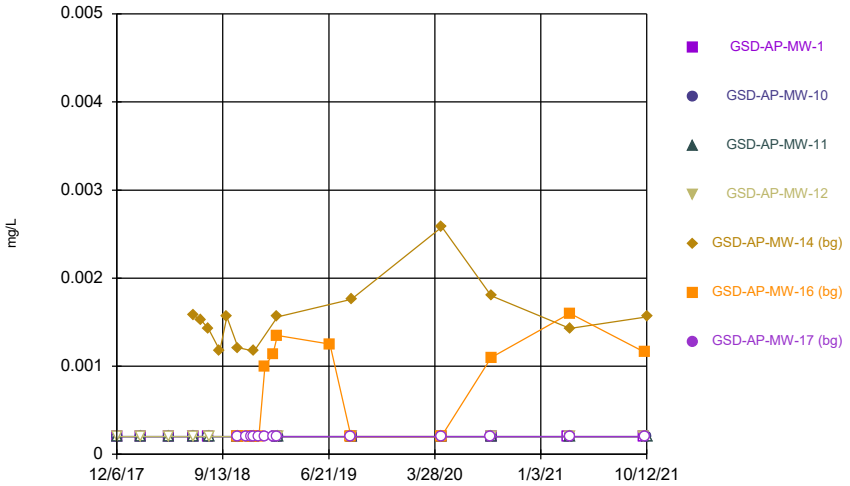
Time Series



Constituent: Fluoride Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

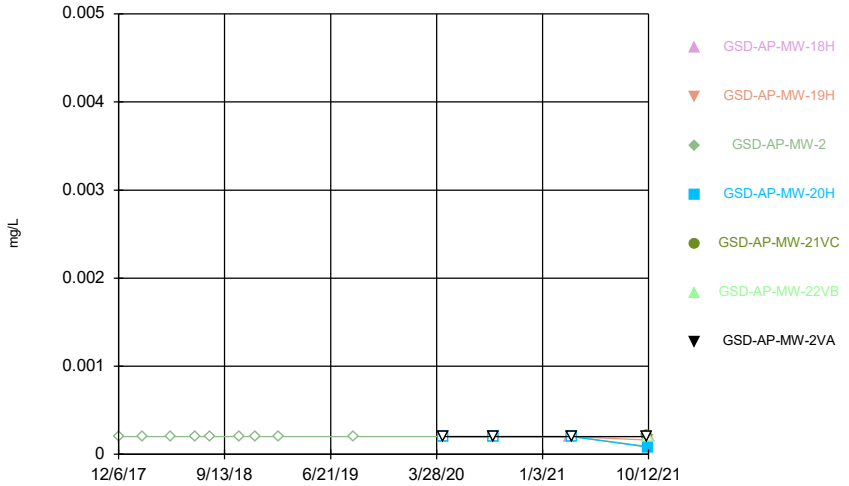
Time Series



Constituent: Lead Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

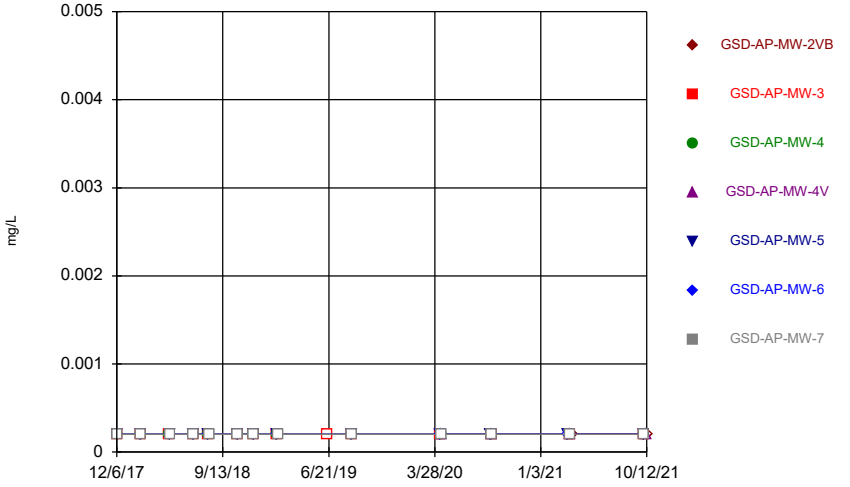
Time Series



Constituent: Lead Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

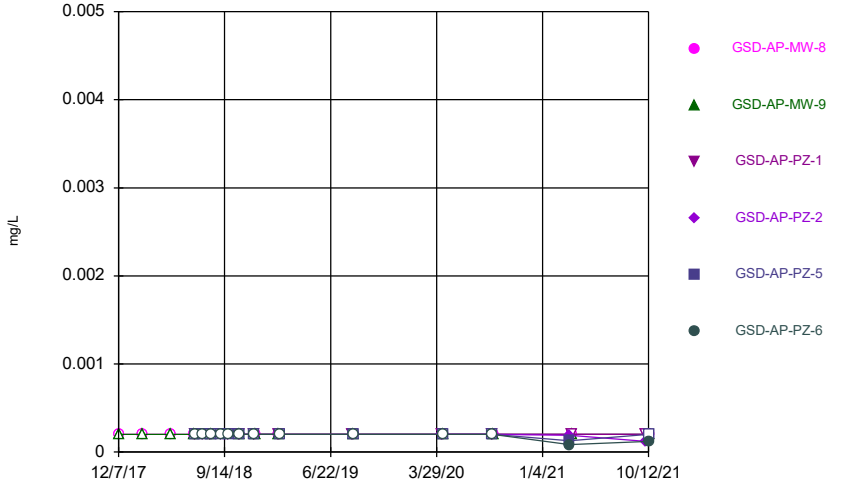
Time Series



Constituent: Lead Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

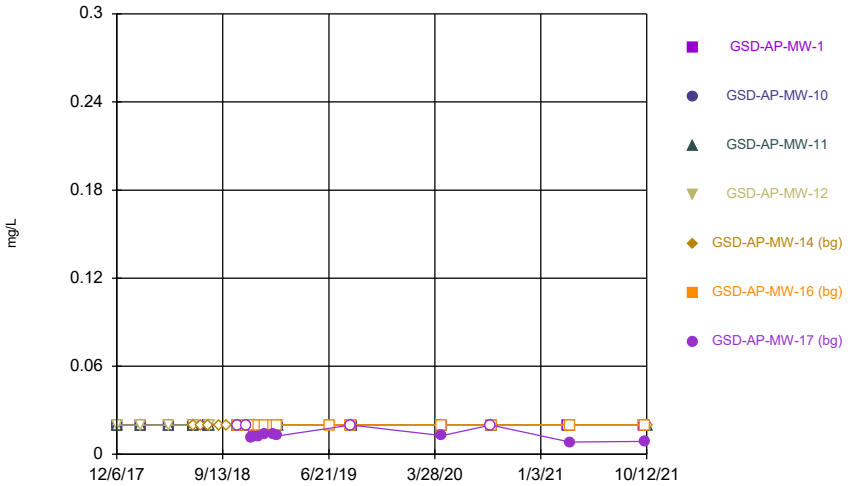
Time Series



Constituent: Lead Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

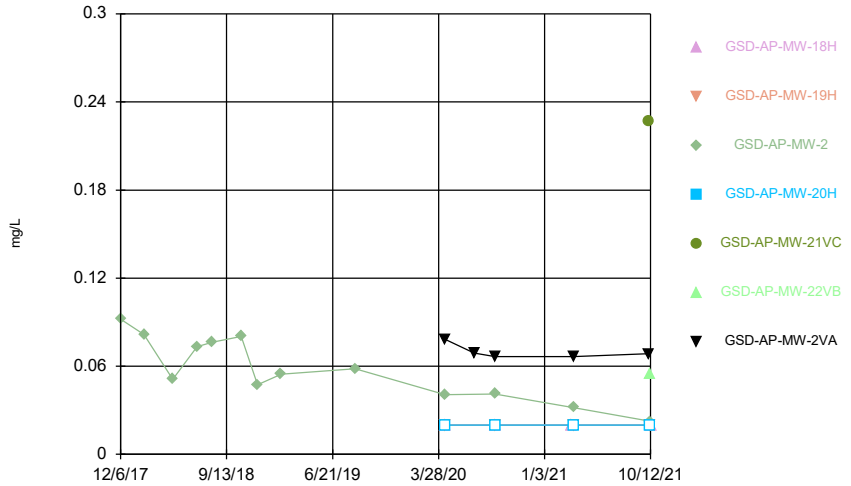
Time Series



Constituent: Lithium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

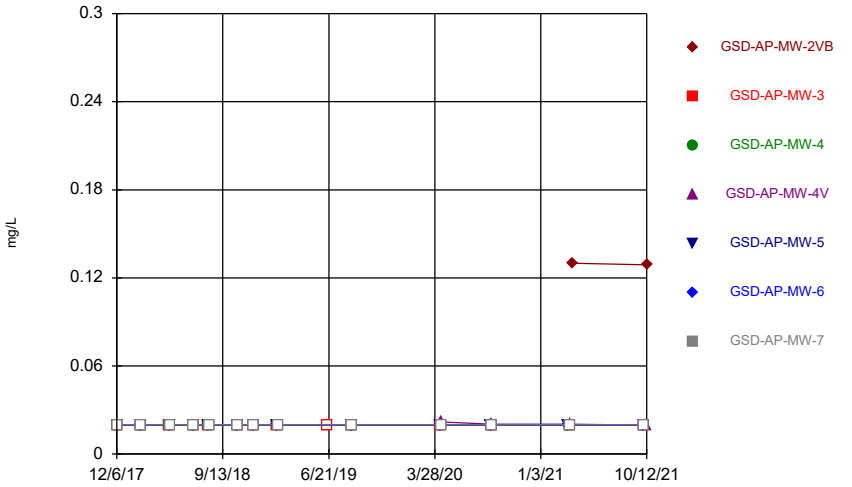
Time Series



Constituent: Lithium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

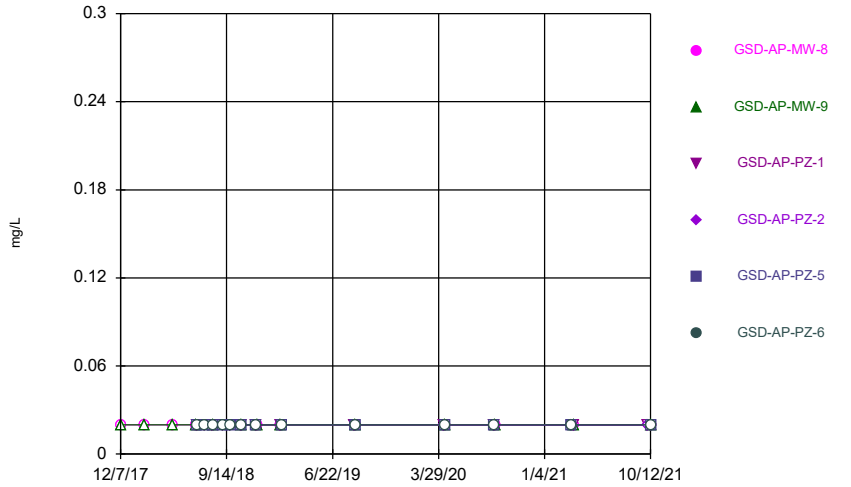
Time Series



Constituent: Lithium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

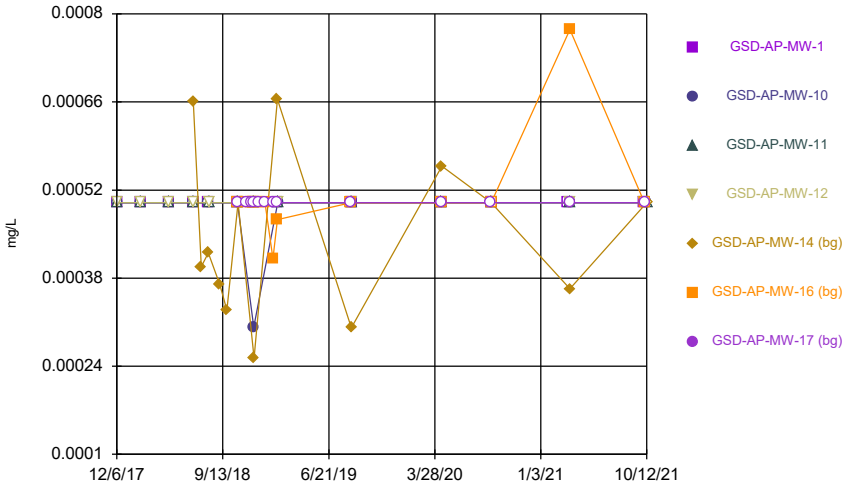
Time Series



Constituent: Lithium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

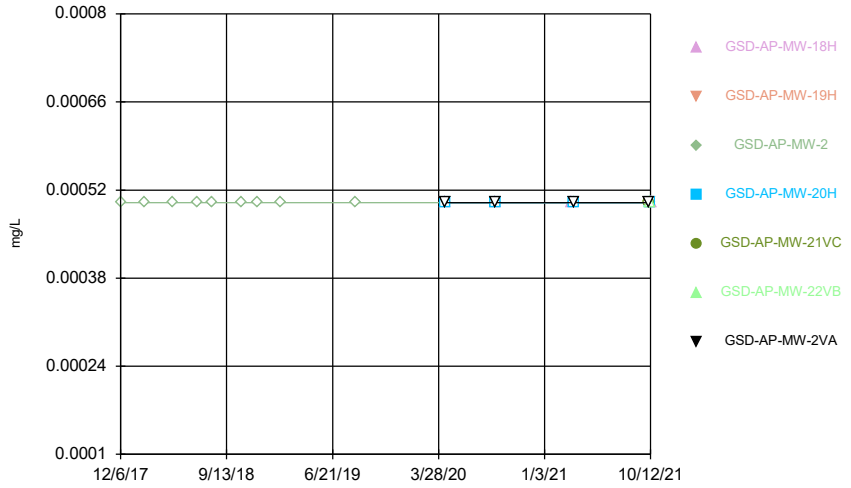
Time Series



Constituent: Mercury Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

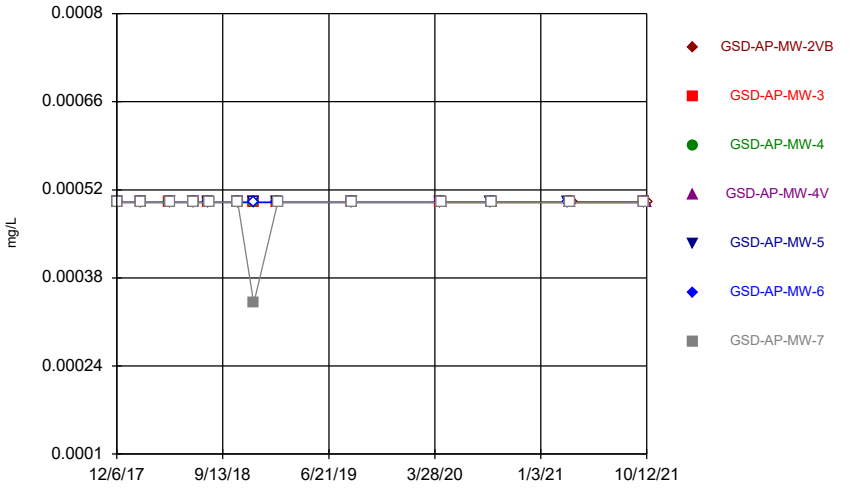
Time Series



Constituent: Mercury Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

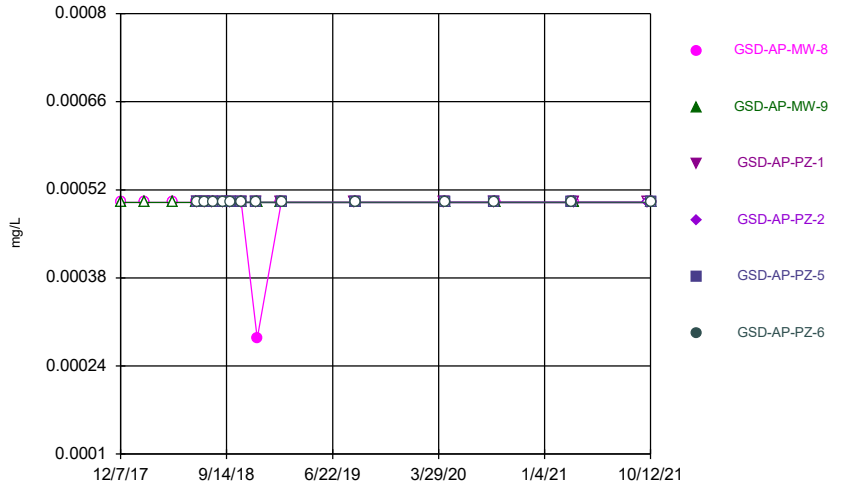
Time Series



Constituent: Mercury Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

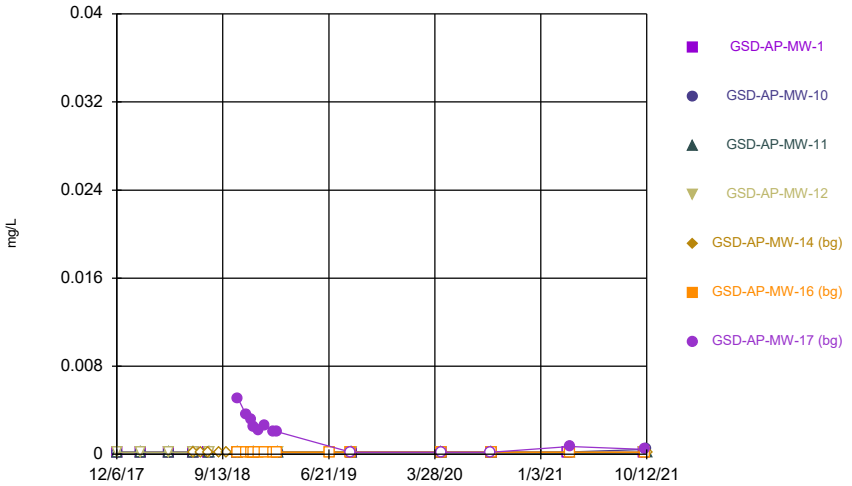
Time Series



Constituent: Mercury Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

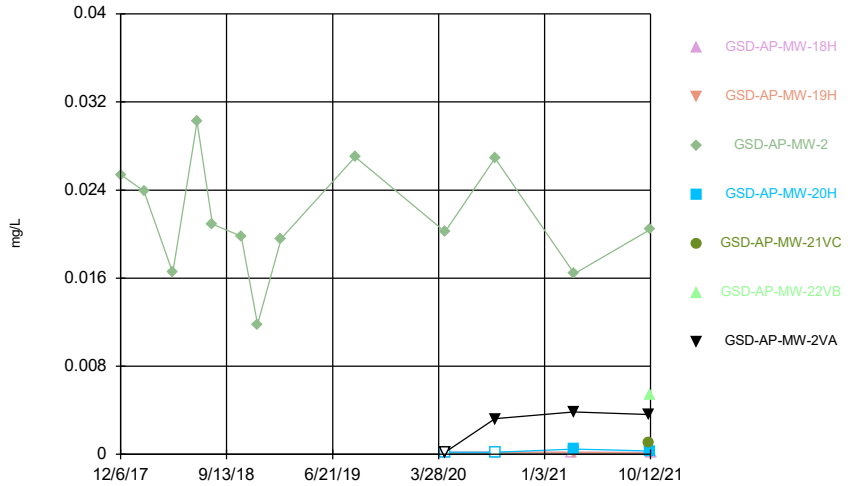
Time Series



Constituent: Molybdenum Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

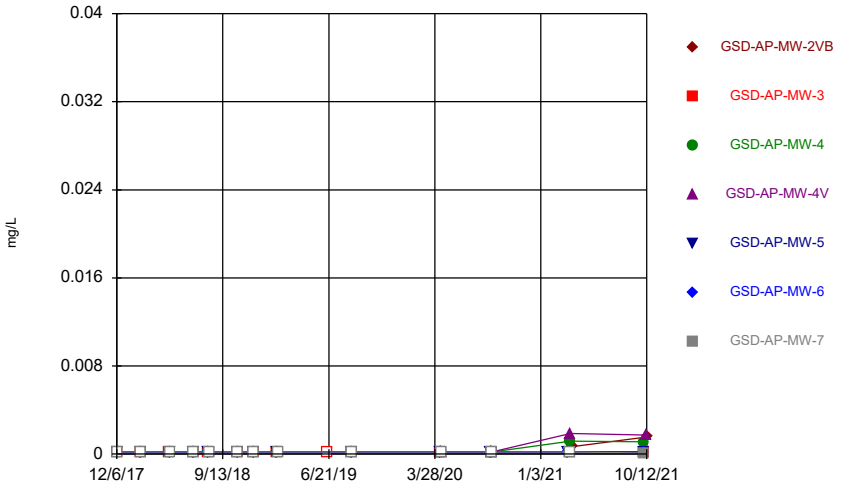
Time Series



Constituent: Molybdenum Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

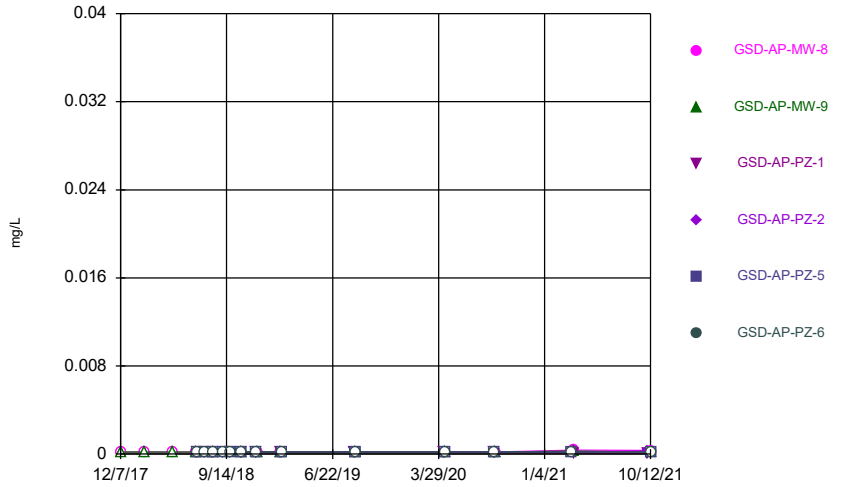
Time Series



Constituent: Molybdenum Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

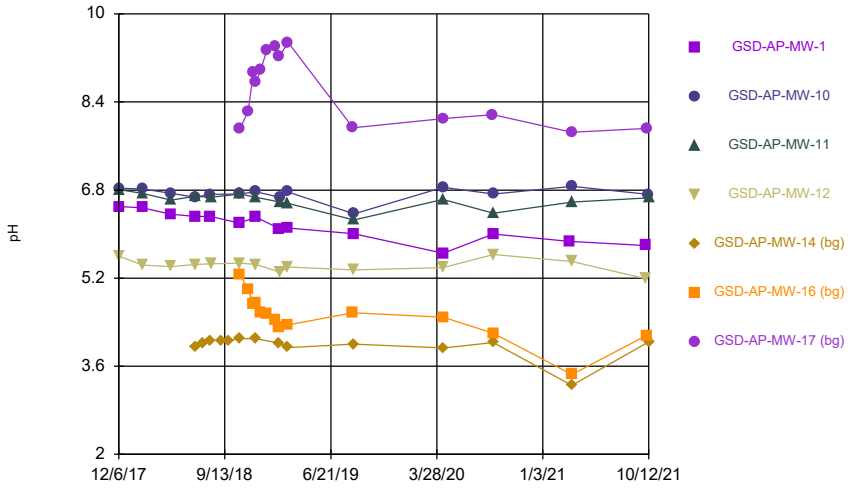
Time Series



Constituent: Molybdenum Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

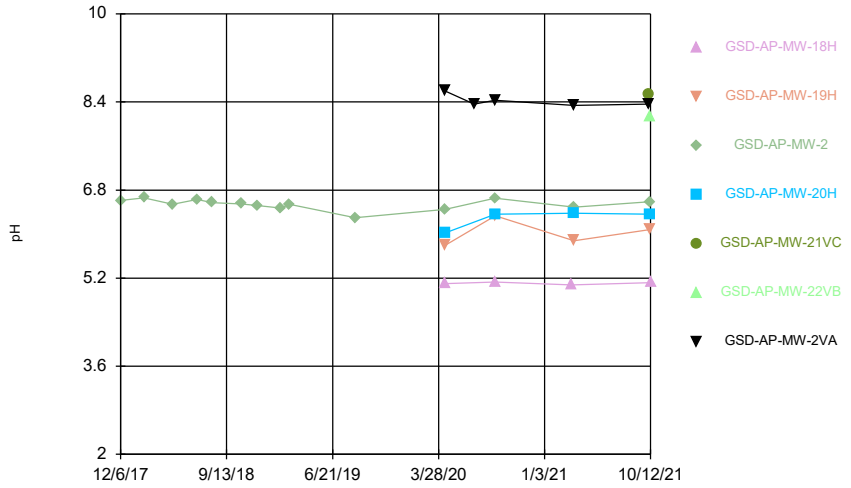


Constituent: pH Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

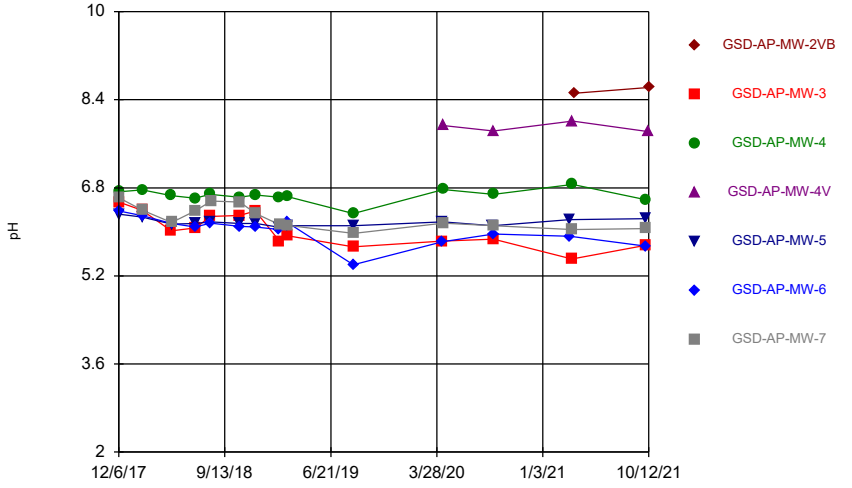


Constituent: pH Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

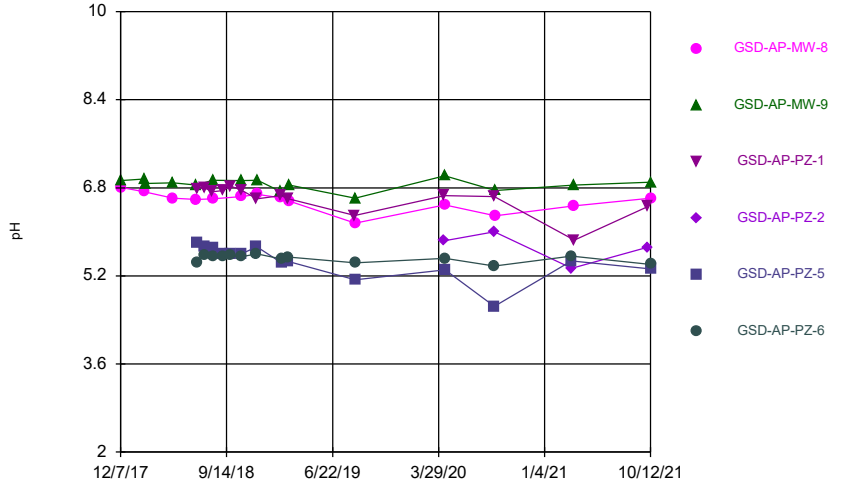


Constituent: pH Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series

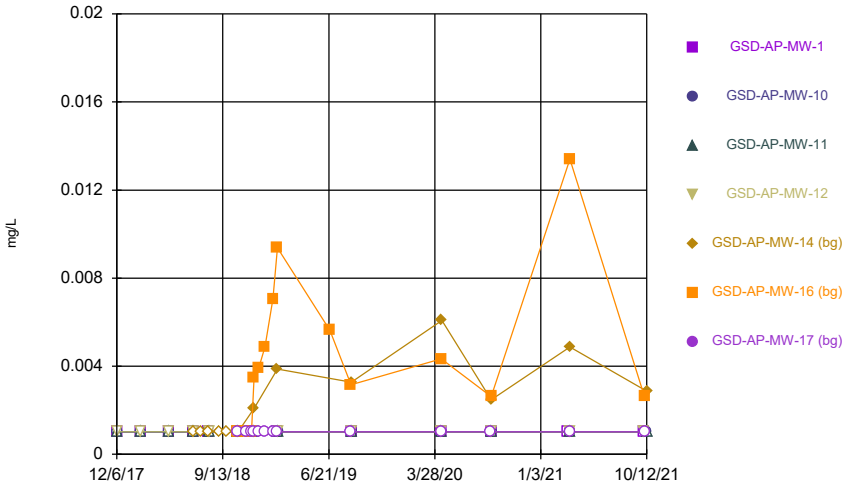


Constituent: pH Analysis Run 1/13/2022 1:46 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

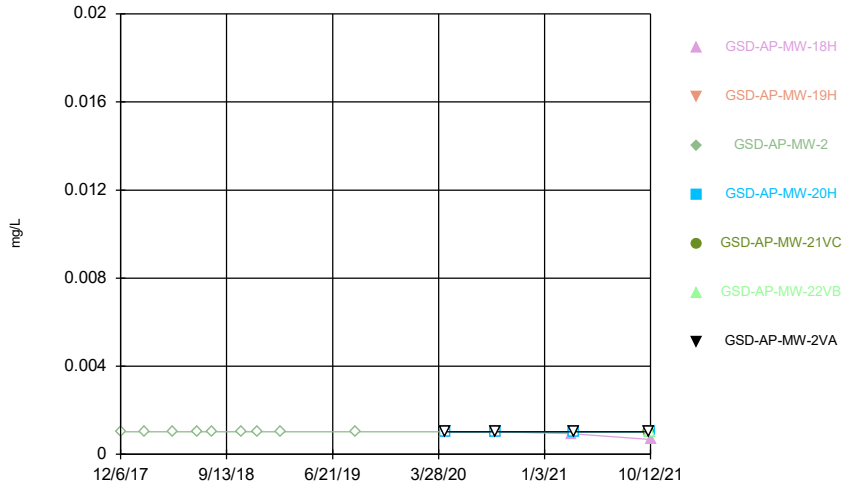
Time Series



Constituent: Selenium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

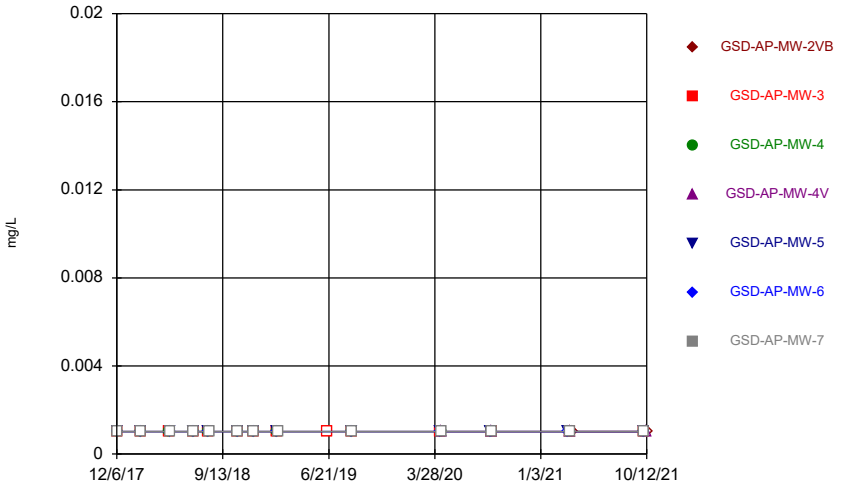
Time Series



Constituent: Selenium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

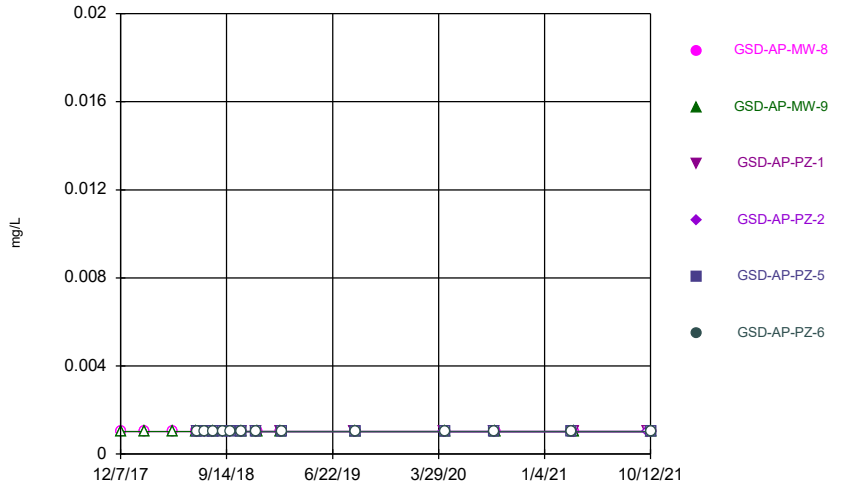
Time Series



Constituent: Selenium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

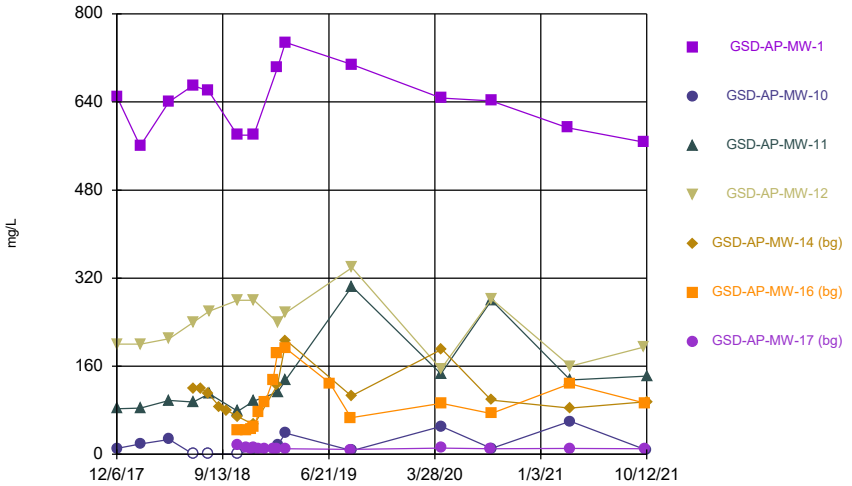
Time Series



Constituent: Selenium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

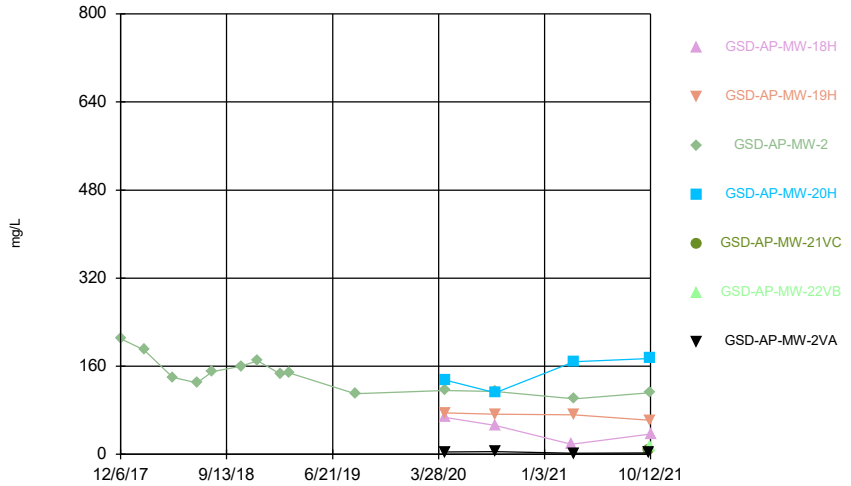
Time Series



Constituent: Sulfate Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

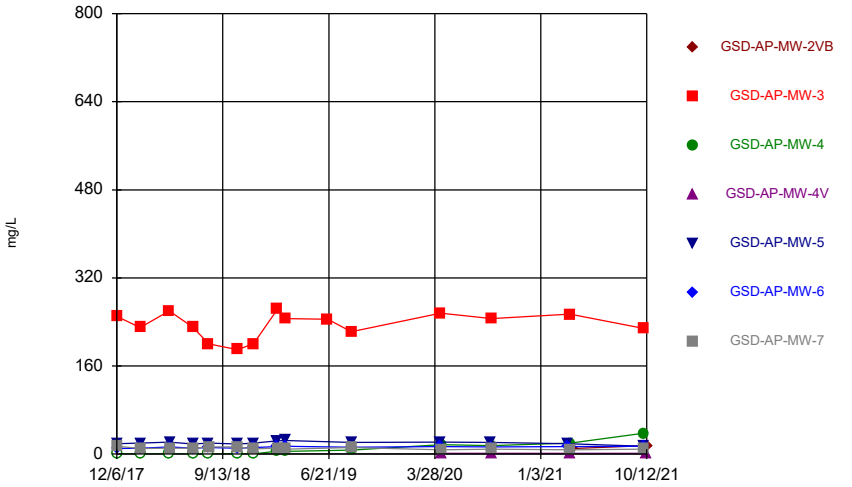
Time Series



Constituent: Sulfate Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

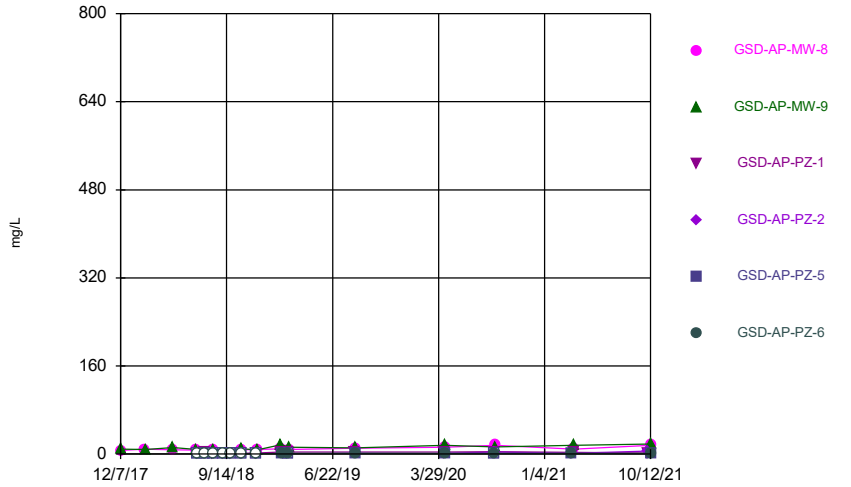
Time Series



Constituent: Sulfate Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

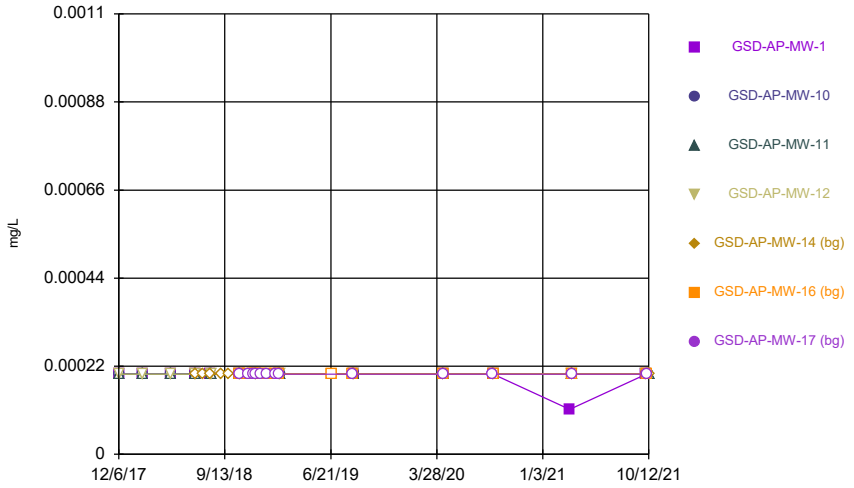
Time Series



Constituent: Sulfate Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

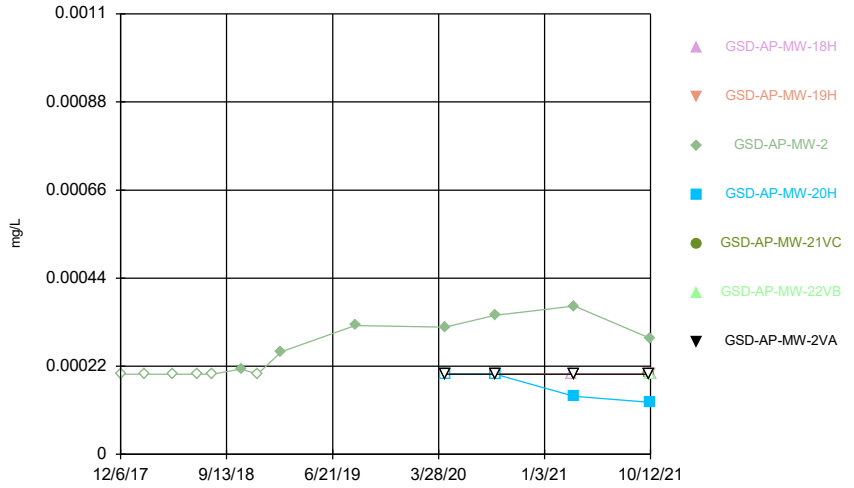
Time Series



Constituent: Thallium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

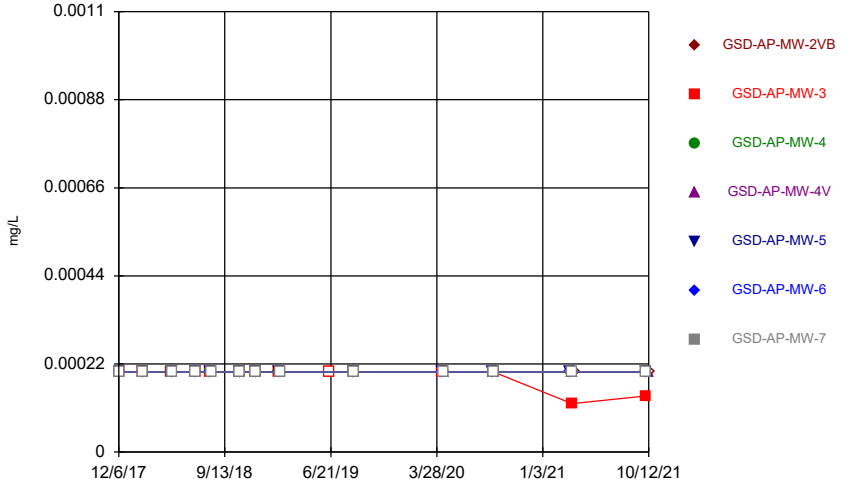
Time Series



Constituent: Thallium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

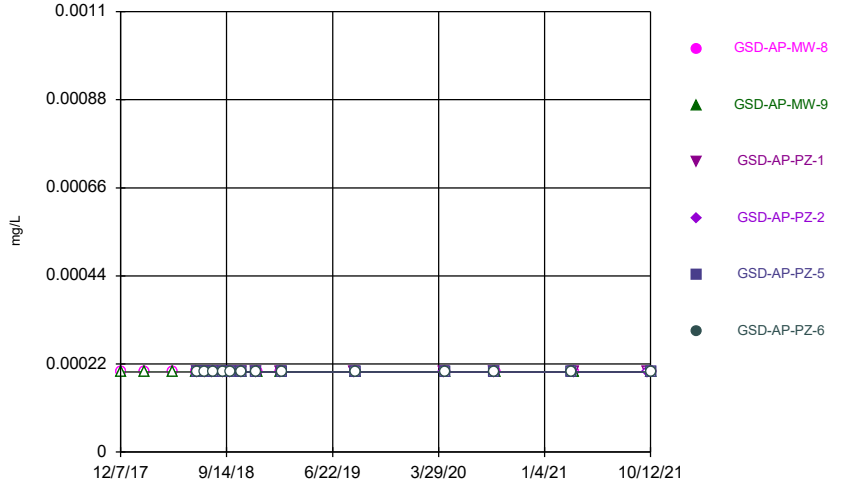
Time Series



Constituent: Thallium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

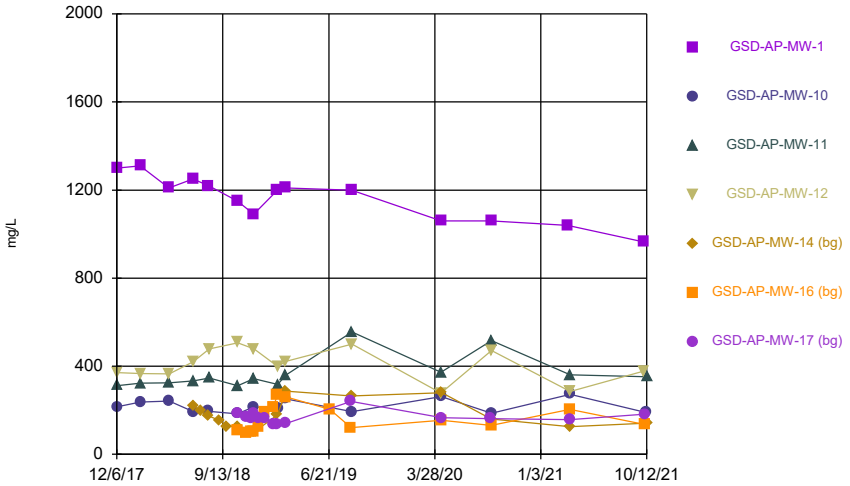
Time Series



Constituent: Thallium Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

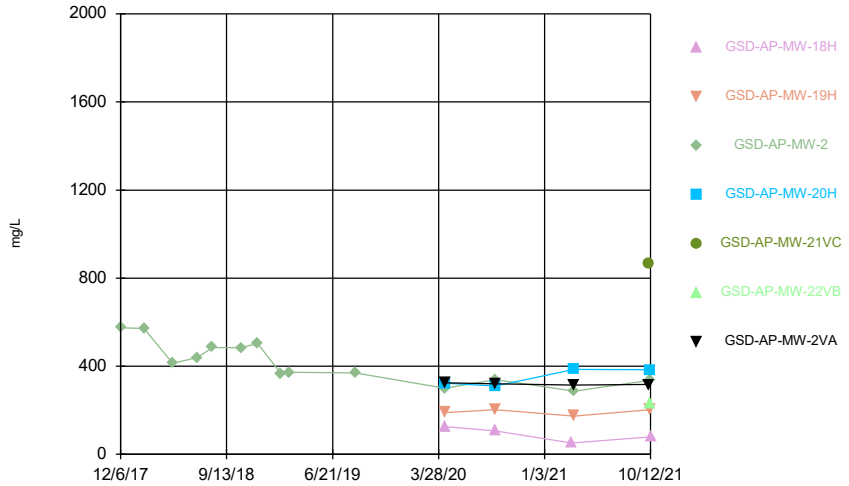
Time Series



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

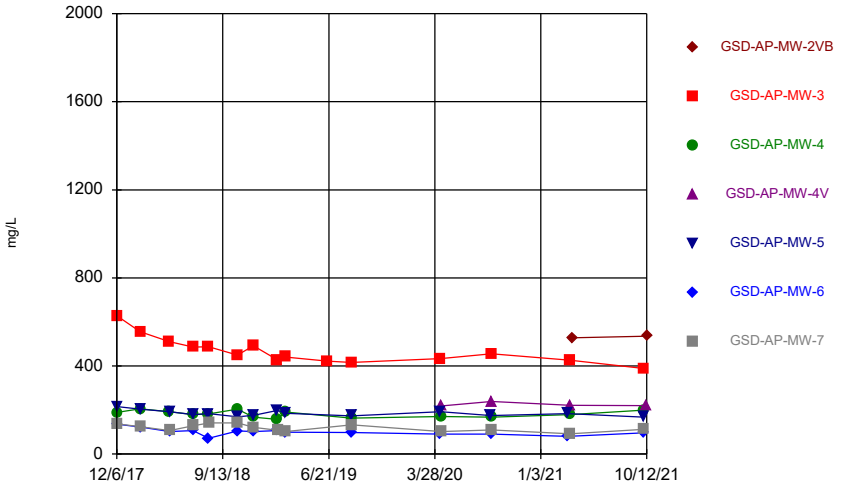
Time Series



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

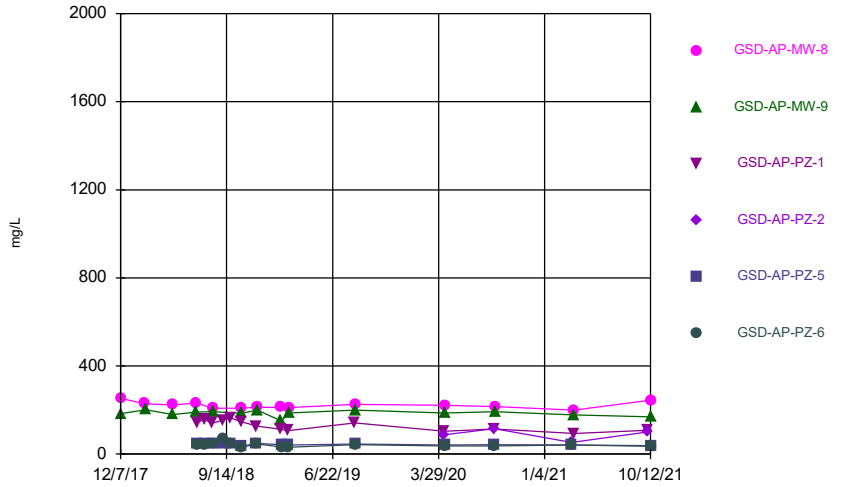
Time Series



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:46 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	<0.00102		
7/18/2018					<0.00102		
8/6/2018					<0.00102		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					<0.00102		
9/24/2018					<0.00102		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					<0.00102	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						<0.00102	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	<0.00102	<0.00102	<0.00102
12/18/2018						<0.00102	<0.00102
1/3/2019						<0.00102	<0.00102
1/24/2019						0.000922 (J)	<0.00102
2/5/2019	<0.00102				<0.00102	<0.00102	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						<0.00102	
8/19/2019						<0.00102	<0.00102
8/20/2019					<0.00102		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				<0.00102	
4/16/2020					<0.00102		<0.00102
8/24/2020							<0.00102
8/25/2020	<0.00102				<0.00102	<0.00102	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	<0.00102						
3/22/2021					<0.00102	<0.00102	<0.00102
3/23/2021		<0.00102	<0.00102	<0.00102			
10/5/2021	<0.00102			<0.00102			
10/6/2021						<0.00102	<0.00102
10/11/2021		<0.00102					
10/12/2021			<0.00102		<0.00102		

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	<0.00102						
3/22/2021							<0.00102
3/23/2021		<0.00102		<0.00102			
3/24/2021			<0.00102				
10/6/2021					0.00051 (J)		<0.00102
10/11/2021		<0.00102	<0.00102	<0.00102		0.00167	
10/12/2021	<0.00102						

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		<0.00102					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					<0.00102		
3/17/2021						<0.00102	
3/22/2021		<0.00102					
3/23/2021							<0.00102
3/24/2021			<0.00102	<0.00102			
3/30/2021	<0.00102						
10/5/2021		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
10/11/2021				<0.00102			
10/12/2021	<0.00102						

Time Series

Constituent: Antimony (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					0.00114 (J)	0.00181 (J)
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					<0.00102	<0.00102
3/17/2021				<0.00102		
3/23/2021	<0.00102	<0.00102				
3/24/2021			<0.00102			
10/5/2021			<0.00102	<0.00102		
10/12/2021	<0.00102	<0.00102			<0.00102	<0.00102

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00179 (J)	0.00247 (J)	0.00279 (J)	<0.0002			
2/6/2018	0.00191 (J)						
2/7/2018		0.00192 (J)	0.00252 (J)				
2/8/2018				<0.0002			
4/23/2018	0.0023 (J)						
4/24/2018		0.00218 (J)	0.00283 (J)	<0.0002			
6/26/2018	0.00306 (J)						
6/27/2018		0.00419 (J)	0.00289 (J)	<0.0002	0.00165 (J)		
7/18/2018					0.00117 (J)		
8/6/2018					<0.0002		
8/7/2018	0.00336 (J)	0.00365 (J)					
8/8/2018			0.00265 (J)	<0.0002			
9/5/2018					<0.0002		
9/24/2018					0.00148 (J)		
10/22/2018	0.00451 (J)	0.00404 (J)					
10/23/2018			0.00287 (J)	<0.0002			
10/24/2018					<0.0002	<0.0002	<0.0002
11/14/2018						<0.0002	<0.0002
11/28/2018						0.00124 (J)	<0.0002
12/4/2018	0.00471 (J)	0.00332 (J)	0.00271 (J)				
12/5/2018				<0.0002	<0.0002	0.00113 (J)	<0.0002
12/18/2018						0.00113 (J)	<0.0002
1/3/2019						0.00175 (J)	<0.0002
1/24/2019						0.00257 (J)	<0.0002
2/5/2019	0.00365 (J)				0.00119 (J)	0.00355 (J)	<0.0002
2/6/2019		0.00333 (J)	0.00272 (J)	<0.0002			
6/24/2019						0.00474 (J)	
8/19/2019						0.00228 (J)	<0.0002
8/20/2019					0.00216 (J)		
8/21/2019	0.00444 (J)						
8/22/2019		0.00394 (J)	0.00229 (J)	<0.0002			
4/14/2020			0.00286 (J)	<0.0002			
4/15/2020	0.00309 (J)	0.00236 (J)				0.0034 (J)	
4/16/2020					0.00483 (J)		<0.0002
8/24/2020							<0.0002
8/25/2020	0.00435 (J)				0.002 (J)	0.00237 (J)	
8/26/2020		0.00422 (J)	0.00246 (J)	<0.0002			
3/16/2021	0.0029						
3/22/2021					0.00188	0.00614	0.00031
3/23/2021		0.00163	0.00275	<0.0002			
10/5/2021	0.00356			<0.0002			
10/6/2021						0.00207	0.00026
10/11/2021		0.0037					
10/12/2021			0.00272		0.00131		

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.809				
2/6/2018			0.774				
4/23/2018			0.643				
6/27/2018			1.01				
8/7/2018			0.988				
10/22/2018			1.01				
12/4/2018			0.553				
2/5/2019			0.74				
8/20/2019			0.825				
4/14/2020		<0.0002		0.00287 (J)			
4/15/2020	<0.0002		0.709				<0.0002
8/25/2020	<0.0002		0.727				0.00135 (J)
8/26/2020		<0.0002		0.00186 (J)			
3/16/2021	0.000136 (J)						
3/22/2021							0.00145
3/23/2021		0.000512		0.00226			
3/24/2021			0.489				
10/6/2021					0.00162		0.00139
10/11/2021		0.00085	0.424	0.00191		0.00408	
10/12/2021	0.00019 (J)						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.00101 (J)					
12/7/2017			0.0132		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	0.0105		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	0.0124				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			0.0132			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			0.013				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	0.0144				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	0.0119			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	0.0107		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	0.0141		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			0.0121	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	0.0133	<0.0002		<0.0002	<0.0002
3/16/2021					8.17E-05 (J)		
3/17/2021						<0.0002	
3/22/2021		0.0002 (J)					
3/23/2021							<0.0002
3/24/2021			0.011	0.00034			
3/30/2021	0.000278						
10/5/2021		0.00021	0.0147		0.00013 (J)	<0.0002	7E-05 (J)
10/11/2021				0.00037			
10/12/2021	0.00043						

Time Series

Constituent: Arsenic (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.00313 (J)	0.00112 (J)				
2/8/2018	0.00247 (J)	<0.0002				
4/25/2018	0.00291 (J)	<0.0002				
6/26/2018	0.00265 (J)	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	0.00203 (J)	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	0.00246 (J)	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	0.00328 (J)					
12/5/2018		0.00111 (J)				
2/5/2019			<0.0002			
2/6/2019	0.00325 (J)	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	0.00302 (J)	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	0.00295 (J)	0.00118 (J)				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	0.00304 (J)	<0.0002				
3/16/2021					8.08E-05 (J)	<0.0002
3/17/2021				8.26E-05 (J)		
3/23/2021	0.00282	0.00063				
3/24/2021			<0.0002			
10/5/2021			<0.0002	9E-05 (J)		
10/12/2021	0.00287	0.00064			<0.0002	<0.0002

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.0807	0.308	0.349	0.0501			
2/6/2018	0.0546						
2/7/2018		0.289	0.297				
2/8/2018				0.0375			
4/23/2018	0.0488						
4/24/2018		0.359	0.338	0.0405			
6/26/2018	0.0479						
6/27/2018		0.307	0.338	0.0466	0.0338		
7/18/2018					0.03		
8/6/2018					0.0274		
8/7/2018	0.0402	0.25					
8/8/2018			0.307	0.0448			
9/5/2018					0.0275		
9/24/2018					0.0264		
10/22/2018	0.0427	0.29					
10/23/2018			0.311	0.054			
10/24/2018					0.0276	0.0499	0.218
11/14/2018						0.0458	0.203
11/28/2018						0.0476	0.191
12/4/2018	0.0434	0.305	0.331				
12/5/2018				0.0493	0.0256	0.0475	0.209
12/18/2018						0.0461	0.199
1/3/2019						0.0426	0.176
1/24/2019						0.0485	0.206
2/5/2019	0.0439				0.0314	0.0354	0.168
2/6/2019		0.265	0.286	0.036			
6/24/2019						0.0294	
8/19/2019						0.0314	0.259
8/20/2019					0.0274		
8/21/2019	0.037						
8/22/2019		0.302	0.214	0.0455			
4/14/2020			0.168	0.0279			
4/15/2020	0.0329	0.35				0.028	
4/16/2020					0.0327		0.257
8/24/2020							0.312
8/25/2020	0.0358				0.0291	0.0261	
8/26/2020		0.322	0.165	0.0503			
3/16/2021	0.0331						
3/22/2021					0.0254	0.0278	0.29
3/23/2021		0.395	0.169	0.0315			
10/5/2021	0.0304			0.0417			
10/6/2021						0.0215	0.307
10/11/2021		0.292					
10/12/2021			0.17		0.0268		

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.0842				
2/6/2018			0.0716				
4/23/2018			0.0518				
6/27/2018			0.0578				
8/7/2018			0.0566				
10/22/2018			0.0536				
12/4/2018			0.0589				
2/5/2019			0.0418				
8/20/2019			0.0685				
4/14/2020		0.153		0.189			
4/15/2020	0.0389		0.0607				0.2
8/25/2020	0.0388		0.0812				0.135
8/26/2020		0.201		0.197			
3/16/2021	0.0243						
3/22/2021							0.114
3/23/2021		0.148		0.217			
3/24/2021			0.0676				
10/6/2021					0.374		0.12
10/11/2021		0.17	0.0807	0.134		0.238	
10/12/2021	0.0298						

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.126					
12/7/2017			0.239		0.279	0.0809	0.083
2/6/2018		0.0721	0.206		0.195		
2/8/2018						0.0566	0.0756
4/24/2018		0.0492	0.217				
4/25/2018					0.26	0.0553	0.0764
6/26/2018			0.208			0.0604	0.0799
6/27/2018		0.0453			0.249		
8/6/2018			0.189				
8/7/2018		0.0431			0.216	0.0542	
8/8/2018							0.0791
10/22/2018		0.0541	0.209				
10/23/2018					0.26	0.0608	0.0898
12/3/2018		0.0545	0.214			0.0633	
12/4/2018							0.0789
12/5/2018					0.245		
2/5/2019		0.0363	0.173		0.215	0.0551	
2/6/2019							0.0685
6/18/2019		0.0369					
8/20/2019		0.0405	0.188		0.238	0.0731	
8/21/2019							0.0946
4/13/2020		0.0349			0.241	0.0635	
4/15/2020			0.159	0.457			0.0653
8/24/2020					0.238		
8/26/2020		0.0363	0.181	0.534		0.0771	0.0845
3/16/2021					0.217		
3/17/2021						0.0656	
3/22/2021		0.0354					
3/23/2021							0.0602
3/24/2021			0.171	0.477			
3/30/2021	0.313						
10/5/2021		0.0344	0.202		0.221	0.0741	0.0716
10/11/2021				0.483			
10/12/2021	0.242						

Time Series

Constituent: Barium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.244	0.187				
2/8/2018	0.135	0.148				
4/25/2018	0.224	0.158				
6/26/2018	0.181	0.16				
6/27/2018			0.115		0.154	0.0298
7/18/2018			0.116		0.15	0.0312
8/7/2018			0.0906			
8/8/2018	0.134	0.161			0.119	0.0265
9/5/2018			0.116		0.123	0.0291
9/24/2018			0.125		0.112	0.029
10/22/2018			0.102			
10/23/2018	0.17	0.183			0.125	0.0298
12/3/2018			0.0784		0.126	0.0307
12/4/2018	0.189					
12/5/2018		0.186				
2/5/2019			0.0578			
2/6/2019	0.226	0.128				
2/7/2019					0.0602	0.028
8/20/2019			0.097			
8/21/2019	0.194	0.183			0.085	0.0312
4/13/2020			0.0529	0.0832		
4/14/2020	0.262	0.186				
4/15/2020					0.0535	0.0296
8/24/2020			0.0733	0.132	0.0565	0.031
8/26/2020	0.235	0.202				
3/16/2021					0.0553	0.0293
3/17/2021				0.045		
3/23/2021	0.249	0.157				
3/24/2021			0.0525			
10/5/2021			0.0811	0.118		
10/12/2021	0.203	0.147			0.0494	0.0303

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	0.00134 (J)		
7/18/2018					0.00133 (J)		
8/6/2018					0.00129 (J)		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					0.00106 (J)		
9/24/2018					0.000991 (J)		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					0.00082 (J)	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						0.00133 (J)	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	0.00141 (J)	<0.00102	<0.00102
12/18/2018						0.000761 (J)	<0.00102
1/3/2019						0.000677 (J)	<0.00102
1/24/2019						0.000703 (J)	<0.00102
2/5/2019	<0.00102				0.0011 (J)	0.000711 (J)	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						0.000605 (J)	
8/19/2019						<0.00102	<0.00102
8/20/2019					0.00129 (J)		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				<0.00102	
4/16/2020					0.00157 (J)		<0.00102
8/24/2020							<0.00102
8/25/2020	<0.00102				0.00117 (J)	<0.00102	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	<0.00102						
3/22/2021					0.000918 (J)	0.000537 (J)	<0.00102
3/23/2021		<0.00102	<0.00102	<0.00102			
10/5/2021	<0.00102			<0.00102			
10/6/2021						0.00049 (J)	<0.00102
10/11/2021		<0.00102					
10/12/2021			<0.00102		0.00115		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	<0.00102						
3/22/2021							<0.00102
3/23/2021		<0.00102		<0.00102			
3/24/2021			<0.00102				
10/6/2021					<0.00102		<0.00102
10/11/2021		<0.00102	<0.00102	<0.00102		<0.00102	
10/12/2021	<0.00102						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		<0.00102					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					<0.00102		
3/17/2021						<0.00102	
3/22/2021		<0.00102					
3/23/2021							<0.00102
3/24/2021			<0.00102	<0.00102			
3/30/2021	<0.00102						
10/5/2021		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
10/11/2021				<0.00102			
10/12/2021	<0.00102						

Time Series

Constituent: Beryllium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					<0.00102	<0.00102
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					<0.00102	<0.00102
3/17/2021				<0.00102		
3/23/2021	<0.00102	<0.00102				
3/24/2021			<0.00102			
10/5/2021			<0.00102	<0.00102		
10/12/2021	<0.00102	<0.00102			<0.00102	<0.00102

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1.28	0.135	0.12	0.0605 (J)			
2/6/2018	1.29						
2/7/2018		0.12	0.109				
2/8/2018				0.0527 (J)			
4/23/2018	1.21						
4/24/2018		0.144	0.124	0.0476 (J)			
6/26/2018	1.25						
6/27/2018		0.0903 (J)	0.111	0.0539 (J)	<0.1015		
7/18/2018					<0.1015		
8/6/2018					<0.1015		
8/7/2018	1.21	0.106					
8/8/2018			0.135	0.0637 (J)			
9/5/2018					<0.1015		
9/24/2018					<0.1015		
10/22/2018	1.22	0.107					
10/23/2018			0.114	0.0696 (J)			
10/24/2018					<0.1015	0.0261 (J)	0.0357 (J)
11/14/2018						0.0209 (J)	0.0348 (J)
11/28/2018						0.0239 (J)	0.0313 (J)
12/4/2018	1.08	0.103	0.124				
12/5/2018				0.0652 (J)	<0.1015	<0.1015	0.0363 (J)
12/18/2018						<0.1015	0.033 (J)
1/3/2019						0.0209 (J)	0.036 (J)
1/24/2019						0.0271 (J)	0.0307 (J)
2/5/2019	1.2				<0.1015	0.0245 (J)	0.0306 (J)
2/6/2019		0.105	0.112	0.0511 (J)			
2/26/2019	1.15	0.146					
2/27/2019			0.14	0.0494 (J)			
2/28/2019					<0.1015	<0.1015	0.0206 (J)
6/24/2019						<0.1015	
8/19/2019						<0.1015	0.0341 (J)
8/20/2019					<0.1015		
8/21/2019	1.24						
8/22/2019		0.0951 (J)	0.272	0.0625 (J)			
4/14/2020			0.154	0.0377 (J)			
4/15/2020	1.13	0.164				<0.1015	
4/16/2020					<0.1015		0.0331 (J)
8/24/2020							0.0303 (J)
8/25/2020	1.11				<0.1015	<0.1015	
8/26/2020		0.108	0.257	0.0698 (J)			
3/16/2021	1.08						
3/22/2021					<0.1015	<0.1015	0.0333 (J)
3/23/2021		0.188	0.142	0.0452 (J)			
10/5/2021	1.02			0.0661 (J)			
10/6/2021						<0.1015	0.0305 (J)
10/11/2021		0.09 (J)					
10/12/2021			0.125		<0.1015		

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.758				
2/6/2018			0.733				
4/23/2018			0.608				
6/27/2018			0.619				
8/7/2018			0.697				
10/22/2018			0.754				
12/4/2018			0.737				
2/5/2019			0.575				
2/26/2019			0.566				
8/20/2019			0.566				
4/14/2020		0.448		0.308			
4/15/2020	0.124		0.461				0.587
8/25/2020	0.105		0.528				0.552
8/26/2020		0.39		0.308			
3/16/2021	0.0545 (J)						
3/22/2021							0.537
3/23/2021		0.41		0.419			
3/24/2021			0.437				
10/6/2021					0.532		0.54
10/11/2021		0.328	0.459	0.504		0.378	
10/12/2021	0.0717 (J)						

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.959					
12/7/2017			0.515		0.566	0.063 (J)	0.102
2/6/2018		1.04	0.541		0.614		
2/8/2018						0.0508 (J)	0.0787 (J)
4/24/2018		0.979	0.475				
4/25/2018					0.498	0.0548 (J)	0.0734 (J)
6/26/2018			0.444			0.0571 (J)	0.094 (J)
6/27/2018		0.982			0.446		
8/6/2018			0.474				
8/7/2018		1			0.442	0.0571 (J)	
8/8/2018							0.103
10/22/2018		1.08	0.496				
10/23/2018					0.436	0.0636 (J)	0.106
12/3/2018		1.05	0.51			0.0568 (J)	
12/4/2018							0.085 (J)
12/5/2018					0.456		
2/5/2019		1.01	0.43		0.453	0.0509 (J)	
2/6/2019							0.0733 (J)
2/25/2019		1.08					
2/26/2019			0.411			0.0527 (J)	
2/27/2019					0.457		0.0548 (J)
6/18/2019		1.09					
8/20/2019		1.06	0.399		0.378	0.0608 (J)	
8/21/2019							0.091 (J)
4/13/2020		1.19			0.359	0.0561 (J)	
4/15/2020			0.344	0.0634 (J)			0.0534 (J)
8/24/2020					0.329		
8/26/2020		1.16	0.398	0.0611 (J)		0.0633 (J)	0.0665 (J)
3/16/2021					0.328		
3/17/2021						0.0563 (J)	
3/22/2021		1.13					
3/23/2021							0.0587 (J)
3/24/2021			0.326	0.0618 (J)			
3/30/2021	0.605						
10/5/2021		1.01	0.344		0.26	0.0649 (J)	0.0673 (J)
10/11/2021				0.0596 (J)			
10/12/2021	0.617						

Time Series

Constituent: Boron (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.0828 (J)	0.0614 (J)				
2/8/2018	0.0691 (J)	0.0531 (J)				
4/25/2018	0.0571 (J)	0.0551 (J)				
6/26/2018	0.0634 (J)	0.0568 (J)				
6/27/2018			<0.1015		<0.1015	<0.1015
7/18/2018			<0.1015		<0.1015	<0.1015
8/7/2018			<0.1015			
8/8/2018	0.0659 (J)	0.0524 (J)			<0.1015	<0.1015
9/5/2018			<0.1015		<0.1015	<0.1015
9/24/2018			<0.1015		<0.1015	<0.1015
10/22/2018			<0.1015			
10/23/2018	0.0666 (J)	0.0576 (J)			<0.1015	<0.1015
12/3/2018			<0.1015		<0.1015	<0.1015
12/4/2018	0.0617 (J)					
12/5/2018		0.0561 (J)				
2/5/2019			<0.1015			
2/6/2019	0.0586 (J)	0.0627 (J)				
2/7/2019					<0.1015	<0.1015
2/25/2019			<0.1015		<0.1015	<0.1015
2/27/2019	0.0428 (J)	0.0474 (J)				
8/20/2019			<0.1015			
8/21/2019	0.0569 (J)	0.0524 (J)			<0.1015	<0.1015
4/13/2020			<0.1015	<0.1015		
4/14/2020	0.0474 (J)	0.0562 (J)				
4/15/2020					<0.1015	<0.1015
8/24/2020			<0.1015	<0.1015	<0.1015	<0.1015
8/26/2020	0.0501 (J)	0.0565 (J)				
3/16/2021					<0.1015	<0.1015
3/17/2021				<0.1015		
3/23/2021	0.0476 (J)	0.0609 (J)				
3/24/2021			<0.1015			
10/5/2021			<0.1015	<0.1015		
10/12/2021	0.0462 (J)	0.0632 (J)			<0.1015	<0.1015

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	0.000596 (J)			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				0.00064 (J)			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	0.000702 (J)			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	0.000732 (J)	0.00064 (J)		
7/18/2018					0.000679 (J)		
8/6/2018					0.000536 (J)		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	0.000587 (J)			
9/5/2018					0.000479 (J)		
9/24/2018					0.00039 (J)		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	0.000552 (J)			
10/24/2018					0.000436 (J)	0.000307 (J)	<0.0002
11/14/2018						0.000417 (J)	<0.0002
11/28/2018						0.000387 (J)	<0.0002
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				0.000661 (J)	0.000307 (J)	0.000317 (J)	<0.0002
12/18/2018						0.000438 (J)	<0.0002
1/3/2019						0.000703 (J)	<0.0002
1/24/2019						0.000736 (J)	<0.0002
2/5/2019	<0.0002				0.000515 (J)	0.00101	<0.0002
2/6/2019		<0.0002	<0.0002	0.000583 (J)			
6/24/2019						0.000686 (J)	
8/19/2019						0.000499 (J)	<0.0002
8/20/2019					0.000622 (J)		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	0.000755 (J)			
4/14/2020			<0.0002	0.000425 (J)			
4/15/2020	<0.0002	<0.0002				0.000697 (J)	
4/16/2020					0.00101		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				0.000584 (J)	0.000507 (J)	
8/26/2020		<0.0002	<0.0002	0.000618 (J)			
3/16/2021	0.000102 (J)						
3/22/2021					0.000407	0.000852	<0.0002
3/23/2021		<0.0002	<0.0002	0.000405			
10/5/2021	0.0001 (J)			0.00037			
10/6/2021						0.00068	<0.0002
10/11/2021		<0.0002					
10/12/2021			<0.0002		0.00059		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0002				
2/6/2018			<0.0002				
4/23/2018			<0.0002				
6/27/2018			<0.0002				
8/7/2018			<0.0002				
10/22/2018			<0.0002				
12/4/2018			<0.0002				
2/5/2019			<0.0002				
8/20/2019			<0.0002				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		<0.0002				<0.0002
8/25/2020	<0.0002		<0.0002				<0.0002
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							<0.0002
3/23/2021		<0.0002		<0.0002			
3/24/2021			6.88E-05 (J)				
10/6/2021					<0.0002		<0.0002
10/11/2021		0.00012 (J)	<0.0002	<0.0002		<0.0002	
10/12/2021	<0.0002						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		0.000438 (J)			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		0.00039					
3/23/2021							9.7E-05 (J)
3/24/2021			<0.0002	<0.0002			
3/30/2021	<0.0002						
10/5/2021		0.00021	<0.0002		<0.0002	<0.0002	<0.0002
10/11/2021				<0.0002			
10/12/2021	<0.0002						

Time Series

Constituent: Cadmium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		0.000304 (J)	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					<0.0002	<0.0002
3/17/2021				<0.0002		
3/23/2021	8.32E-05 (J)	<0.0002				
3/24/2021			<0.0002			
10/5/2021			<0.0002	<0.0002		
10/12/2021	<0.0002	<0.0002			8E-05 (J)	<0.0002

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	271	42	70	49			
2/6/2018	275						
2/7/2018		47.6	72.4				
2/8/2018				50			
4/23/2018	269						
4/24/2018		50.1	72.3	50.5			
6/26/2018	268						
6/27/2018		37.1	73.1	56.3	16.6		
7/18/2018					15.3		
8/6/2018					13.8		
8/7/2018	259	37.4					
8/8/2018			76	65.7			
9/5/2018					12.1		
9/24/2018					11.8		
10/22/2018	240	36.3					
10/23/2018			70.2	68.3			
10/24/2018					10.2	18	28.3
11/14/2018						14.9	27.5
11/28/2018						14.8	20.7
12/4/2018	254	42.1	74				
12/5/2018				64.3	9.14	14.8	25.3
12/18/2018						16.4	20.9
1/3/2019						19.7	18.5
1/24/2019						19.6	17
2/5/2019	292				15.1	20.8	17.1
2/6/2019		41.3	73.1	52.2			
2/26/2019	254	53.3					
2/27/2019			82.2	60.2			
2/28/2019					21.4	21.5	18.6
6/24/2019						18.4	
8/19/2019						12.8	25.3
8/20/2019					14.4		
8/21/2019	272						
8/22/2019		38.5	133	89.4			
4/14/2020			82.4	40			
4/15/2020	231	54.1				13.1	
4/16/2020					20.1		30.7
8/24/2020							30.8
8/25/2020	218				13.1	12.2	
8/26/2020		37.8	111	68.4			
3/16/2021	218						
3/22/2021					12.2	18.4	31
3/23/2021		57	75.9	42			
10/5/2021	198			55.8			
10/6/2021						13.4	31
10/11/2021		38.2					
10/12/2021			78.6		11.8		

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			128				
2/6/2018			130				
4/23/2018			95.9				
6/27/2018			99.4				
8/7/2018			107				
10/22/2018			107				
12/4/2018			120				
2/5/2019			80.6				
2/26/2019			79.6				
8/20/2019			92.3				
4/14/2020		32.9		51.5			
4/15/2020	19.1		69.2				5
8/25/2020	14.9		80.5				4.97
8/26/2020		39.3		47.6			
3/16/2021	5.77						
3/22/2021							5.71
3/23/2021		31.7		57.6			
3/24/2021			61.5				
10/6/2021					3.46		5.38
10/11/2021		40	87.1	63.4		9.35	
10/12/2021	10.3						

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		125					
12/7/2017			30.1		48.2	29.8	23.4
2/6/2018		110	30.6		47.8		
2/8/2018						24.3	20.1
4/24/2018		88.8	27.8				
4/25/2018					41.8	19.8	17.4
6/26/2018			26.2			17.8	21.8
6/27/2018		80.8			36.9		
8/6/2018			27.5				
8/7/2018		88.5			37.6	18.3	
8/8/2018							25.4
10/22/2018		92.7	27.7				
10/23/2018					35.3	18.1	25.6
12/3/2018		105	32.3			16.6	
12/4/2018							19
12/5/2018					36.3		
2/5/2019		68.6	25.5		36.6	14.5	
2/6/2019							16.4
2/25/2019		70.6					
2/26/2019			26.4			16	
2/27/2019					39.6		15.6
6/18/2019		80.5					
8/20/2019		74.1	23.5		33.7	15.1	
8/21/2019							23.5
4/13/2020		69.5			43	12.5	
4/15/2020			22	23.9			14
8/24/2020					35.5		
8/26/2020		75.7	22.8	23.5		12.9	16.7
3/16/2021					38.1		
3/17/2021						11.3	
3/22/2021		64.9					
3/23/2021							12.5
3/24/2021			23.1	22.9			
3/30/2021	3.71						
10/5/2021		65.9	27.4		36	11.4	15.9
10/11/2021				23			
10/12/2021	3.96						

Time Series

Constituent: Calcium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	66.1	38.7				
2/8/2018	58	38.8				
4/25/2018	56.3	40.3				
6/26/2018	57.7	39.9				
6/27/2018			39.4		4.56	3.89
7/18/2018			38.4		3.92	3.8
8/7/2018			36.7			
8/8/2018	51.2	42.3			3.74	3.89
9/5/2018			43.6		3.38	3.78
9/24/2018			44.5		3.25	3.73
10/22/2018			45			
10/23/2018	50.9	39.8			3.37	3.79
12/3/2018			33.7		3.67	3.79
12/4/2018	51.9					
12/5/2018		43.8				
2/5/2019			30.1			
2/6/2019	55	34.9				
2/7/2019					2.89	3.75
2/25/2019			25.6		2.95	3.81
2/27/2019	53.4	42.5				
8/20/2019			38.3			
8/21/2019	71.5	50.9			3.04	3.71
4/13/2020			25.9	16.1		
4/14/2020	56.2	43.6				
4/15/2020					2.93	3.56
8/24/2020			29	24.8	2.94	3.45
8/26/2020	55.5	43.2				
3/16/2021					2.9	3.44
3/17/2021				5.21		
3/23/2021	48.9	38.1				
3/24/2021			22.2			
10/5/2021			25.4	17.6		
10/12/2021	66.3	35.4			2.94	3.29

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.2	6.9	6.3	6.2			
2/6/2018	5.9						
2/7/2018		6.1	5.4				
2/8/2018				6.1			
4/23/2018	5.9						
4/24/2018		6.9	5.7	5.9			
6/26/2018	5.7						
6/27/2018		5.6	5.4	5.5	3.1		
7/18/2018					3.4		
8/6/2018					2.8		
8/7/2018	5.3	5.1					
8/8/2018			5.2	5.3			
9/5/2018					2.8		
9/24/2018					3.1		
10/22/2018	5.6	5.5					
10/23/2018			5.4	5.8			
10/24/2018					2.8	3.3	4
11/14/2018						3.6	3.6
11/28/2018						3.5	3.5
12/4/2018	5.8	5.6	5.3				
12/5/2018				6	2.2	3.3	3.2
12/18/2018						3.6	3.4
1/3/2019						3.4	3.2
1/24/2019						3.91	3.15
2/5/2019	5.8				3.12	3.94	2.98
2/6/2019		6.24	5.89	5.95			
2/26/2019	5.92	8.28					
2/27/2019			6.2	5.88			
2/28/2019					3.45	4.15	3.05
6/24/2019						3.36 (D)	
8/19/2019						3.42	2.8
8/20/2019					3.27		
8/21/2019	5.26						
8/22/2019		5.66	4.64	6.31			
4/14/2020			5.46	5.74			
4/15/2020	5.5	6.49				3.39	
4/16/2020					3.74		2.93
8/24/2020							2.82
8/25/2020	5.59				3.03	2.94	
8/26/2020		5.39	4.74	5.91			
3/16/2021	6.2						
3/22/2021					3.15	3.61	2.94
3/23/2021		7.14	5.54	6.3			
10/5/2021	6.1			6.26			
10/6/2021						3.17	2.98
10/11/2021		5.72					
10/12/2021			5.8		2.87		

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			4.1				
2/6/2018			3.1				
4/23/2018			3.7				
6/27/2018			2.2				
8/7/2018			2.6				
10/22/2018			2.8				
12/4/2018			4.1				
2/5/2019			2.56				
2/26/2019			3.03				
8/20/2019			2.24				
4/14/2020		7.35		6.64			
4/15/2020	6		2.16				6.47
8/25/2020	5.79		2				6.4
8/26/2020		7.03		6.73			
3/16/2021	3.85						
3/22/2021							6.65
3/23/2021		7.11		6.33			
3/24/2021			2.29				
10/6/2021					166		6.82
10/11/2021		7.04	2.43	6.37		1.72	
10/12/2021	4.59						

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		7.6					
12/7/2017			8.5		8.7	10	7.9
2/6/2018		7.6	8.8		8.5		
2/8/2018						9.5	6.7
4/24/2018		7.5	8.4				
4/25/2018					7.6	9.1	7
6/26/2018			8.7			9.5	7.4
6/27/2018		7.3			7.1		
8/6/2018			11				
8/7/2018		7.6			6.9	9	
8/8/2018							7.7
10/22/2018		6.9	8.6				
10/23/2018					6.7	9.9	8
12/3/2018		6.8	9.1			8.7	
12/4/2018							6.7
12/5/2018					6.7		
2/5/2019		6.95	9.81		7.24	8.73	
2/6/2019							6.84
2/25/2019		6.55					
2/26/2019			13			8.66	
2/27/2019					7.38		6.21
6/18/2019		6.62					
8/20/2019		6.07	9.62		6.53	9.55	
8/21/2019							7.35
4/13/2020		5.95			6.48	8.6	
4/15/2020			9.27	5.16			4.99
8/24/2020					6.64		
8/26/2020		5.89	8.96	5.37		9.21	6.19
3/16/2021					7.14		
3/17/2021						8.59	
3/22/2021		5.26					
3/23/2021							4.87
3/24/2021			8.61	5.55			
3/30/2021	32						
10/5/2021		5.09	9.3		6.78	9.09	6.43
10/11/2021				5.65			
10/12/2021	38						

Time Series

Constituent: Chloride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	5.2	7				
2/8/2018	4.1					
2/12/2018		6.6				
4/25/2018	5.3	7.1				
6/26/2018	5	6.4				
6/27/2018			3.6		4.2	4.1
7/18/2018			3.8		4.1	4.3
8/7/2018			3.3			
8/8/2018	4.8	5.5			3.3	3.8
9/5/2018			3.4		3.7	3.9
9/24/2018			3.8		3.9	4.2
10/22/2018			3.3			
10/23/2018	4.4	6.7			4	4.1
12/3/2018			3.2		3.6	3.8
12/4/2018	4.2					
12/5/2018		5.9				
2/5/2019			3.78			
2/6/2019	5.84	7.26				
2/7/2019					3.72	4.15
2/25/2019			3.66		3.95	4.2
2/27/2019	6.52	6.77				
8/20/2019			3.52			
8/21/2019	5.89	6.16			3.85	4
4/13/2020			3.36	5.42		
4/14/2020	5.21	7.27				
4/15/2020					3.83	3.71
8/24/2020			3.35	5.46	3.96	3.59
8/26/2020	5.16	6.57				
3/16/2021					3.98	3.66
3/17/2021				5.53		
3/23/2021	5.3	7.42				
3/24/2021			3.45			
10/5/2021			3.23	5.79		
10/12/2021	5.6	7.78			4.07	3.68

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	<0.00102		
7/18/2018					<0.00102		
8/6/2018					<0.00102		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					<0.00102		
9/24/2018					<0.00102		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					<0.00102	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						<0.00102	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	<0.00102	<0.00102	<0.00102
12/18/2018						<0.00102	<0.00102
1/3/2019						<0.00102	<0.00102
1/24/2019						<0.00102	<0.00102
2/5/2019	<0.00102				<0.00102	<0.00102	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						0.00325 (J)	
8/19/2019						<0.00102	<0.00102
8/20/2019					<0.00102		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				<0.00102	
4/16/2020					<0.00102		0.00267 (J)
8/24/2020							<0.00102
8/25/2020	<0.00102				<0.00102	<0.00102	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	0.000376 (J)						
3/22/2021					0.000771 (J)	0.000546 (J)	0.000509 (J)
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)			
10/5/2021	0.00023 (J)			0.00034 (J)			
10/6/2021						0.00046 (J)	0.00027 (J)
10/11/2021		0.00028 (J)					
10/12/2021			0.00027 (J)		0.00059 (J)		

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	0.000363 (J)						
3/22/2021							0.000433 (J)
3/23/2021		0.000404 (J)		0.000417 (J)			
3/24/2021			0.00047 (J)				
10/6/2021					0.00111		0.00025 (J)
10/11/2021		0.00048 (J)	0.00048 (J)	0.00025 (J)		0.00041 (J)	
10/12/2021	0.00021 (J)						

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		0.00285 (J)					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					0.000397 (J)		
3/17/2021						0.000338 (J)	
3/22/2021		0.000293 (J)					
3/23/2021							0.000406 (J)
3/24/2021			0.000323 (J)	0.000402 (J)			
3/30/2021	0.00112						
10/5/2021		0.00023 (J)	<0.00102		0.00028 (J)	0.00025 (J)	0.00025 (J)
10/11/2021				0.00031 (J)			
10/12/2021	0.00035 (J)						

Time Series

Constituent: Chromium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					<0.00102	<0.00102
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					0.000534 (J)	0.000534 (J)
3/17/2021				0.000764 (J)		
3/23/2021	0.0003 (J)	0.000422 (J)				
3/24/2021			0.000442 (J)			
10/5/2021			0.00035 (J)	0.00035 (J)		
10/12/2021	<0.00102	0.00031 (J)			0.00034 (J)	0.00031 (J)

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00818 (J)	<0.0002	<0.0002	0.00221 (J)			
2/6/2018	0.0123						
2/7/2018		<0.0002	<0.0002				
2/8/2018				0.00221 (J)			
4/23/2018	0.0204						
4/24/2018		<0.0002	<0.0002	0.00257 (J)			
6/26/2018	0.0224						
6/27/2018		<0.0002	<0.0002	0.00266 (J)	0.0382		
7/18/2018					0.0366		
8/6/2018					0.0308		
8/7/2018	0.0193	<0.0002					
8/8/2018			<0.0002	0.00251 (J)			
9/5/2018					0.0291		
9/24/2018					0.0286		
10/22/2018	0.0243	<0.0002					
10/23/2018			<0.0002	0.00399 (J)			
10/24/2018					0.0269	0.0129	<0.0002
11/14/2018						0.0114	<0.0002
11/28/2018						0.0168	<0.0002
12/4/2018	0.0166	<0.0002	<0.0002				
12/5/2018				0.00466 (J)	0.0215	0.0161	<0.0002
12/18/2018						0.0234	<0.0002
1/3/2019						0.038	<0.0002
1/24/2019						0.04	<0.0002
2/5/2019	0.0264				0.0359	0.0538	<0.0002
2/6/2019		<0.0002	<0.0002	0.00485 (J)			
6/24/2019						0.041	
8/19/2019						0.0247	<0.0002
8/20/2019					0.0391		
8/21/2019	0.0242						
8/22/2019		<0.0002	0.00756	0.00658			
4/14/2020			<0.0002	0.0035 (J)			
4/15/2020	0.0178	<0.0002				0.0373	
4/16/2020					0.056		<0.0002
8/24/2020							<0.0002
8/25/2020	0.0193				0.0365	0.0294	
8/26/2020		<0.0002	0.00599	0.00547			
3/16/2021	0.0184						
3/22/2021					0.0262	0.0469	0.000133 (J)
3/23/2021		0.00037	0.000388	0.00378			
10/5/2021	0.0169			0.00448			
10/6/2021						0.0321	0.00013 (J)
10/11/2021		0.00089					
10/12/2021			0.00027		0.0291		

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.0246				
2/6/2018			0.0243				
4/23/2018			0.0258				
6/27/2018			0.0362				
8/7/2018			0.0332				
10/22/2018			0.0438				
12/4/2018			0.0252				
2/5/2019			0.0362				
8/20/2019			0.0366				
4/14/2020		0.00886		0.0122			
4/15/2020	<0.0002		0.0324				<0.0002
8/25/2020	<0.0002		0.0298				<0.0002
8/26/2020		0.0101		0.0104			
3/16/2021	0.000577						
3/22/2021							<0.0002
3/23/2021		0.00674		0.0125			
3/24/2021			0.0316				
10/6/2021					0.00021		<0.0002
10/11/2021		0.00579	0.0165	0.00995		<0.0002	
10/12/2021	0.00062						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.0302					
12/7/2017			0.0252		0.00331 (J)	0.00592 (J)	<0.0002
2/6/2018		0.0371	0.0243		0.00323 (J)		
2/8/2018						0.00297 (J)	<0.0002
4/24/2018		0.0251	0.027				
4/25/2018					0.00258 (J)	<0.0002	<0.0002
6/26/2018			0.0242			<0.0002	<0.0002
6/27/2018		0.0234			0.00218 (J)		
8/6/2018			0.0205				
8/7/2018		0.0223			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		0.03	0.0259				
10/23/2018					0.0023 (J)	<0.0002	<0.0002
12/3/2018		0.0238	0.0228			<0.0002	
12/4/2018							<0.0002
12/5/2018					0.00233 (J)		
2/5/2019		0.0232	0.0263		0.0021 (J)	<0.0002	
2/6/2019							<0.0002
6/18/2019		0.0263					
8/20/2019		0.0257	0.0293		0.00223 (J)	<0.0002	
8/21/2019							<0.0002
4/13/2020		0.0209			<0.0002	<0.0002	
4/15/2020			0.0252	<0.0002			<0.0002
8/24/2020					0.00222 (J)		
8/26/2020		0.0191	0.0231	<0.0002		<0.0002	<0.0002
3/16/2021					0.00136		
3/17/2021						0.00102	
3/22/2021		0.0183					
3/23/2021							0.00102
3/24/2021			0.0268	8.16E-05 (J)			
3/30/2021	0.000116 (J)						
10/5/2021		0.016	0.0238		0.00116	0.00104	0.00018 (J)
10/11/2021				<0.0002			
10/12/2021	<0.0002						

Time Series

Constituent: Cobalt (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.00212 (J)	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	0.00204 (J)	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		0.00341 (J)	<0.0002
7/18/2018			<0.0002		0.00341 (J)	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			0.00221 (J)	<0.0002
9/5/2018			<0.0002		0.00202 (J)	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		0.00227 (J)	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	0.00232 (J)	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	0.00303 (J)	<0.0002			0.00225 (J)	<0.0002
4/13/2020			<0.0002	0.00489 (J)		
4/14/2020	0.00385 (J)	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	0.00237 (J)	<0.0002	<0.0002
8/26/2020	0.00388 (J)	<0.0002				
3/16/2021					0.000384	0.000108 (J)
3/17/2021				0.00616		
3/23/2021	0.003	0.00103				
3/24/2021			<0.0002			
10/5/2021			0.00044	0.00287		
10/12/2021	0.00298	0.00113			8E-05 (J)	0.00014 (J)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.694	0.585	0.891	0.435 (U)			
2/6/2018	0.641						
2/7/2018		0.474	0.786				
2/8/2018				0.477			
4/23/2018	-0.0527 (U)						
4/24/2018		0.463 (U)	0.935	0.695			
6/26/2018	0.162 (U)						
6/27/2018		0.678	0.537	0.183 (U)	0.616		
7/18/2018					0.859		
8/6/2018					0.654		
8/7/2018	0.87	0.495 (U)					
8/8/2018			1.28	0.817			
9/5/2018					0.855		
9/24/2018					0.787		
10/22/2018	0.691	0.36 (U)					
10/23/2018			1.3	0.796			
10/24/2018					1.14	0.564	0.694
11/14/2018						-0.0027 (U)	0.398 (U)
11/28/2018						0.222 (U)	0.428 (U)
12/4/2018	0.213 (U)	0.407 (U)	1.05				
12/5/2018				0.498 (U)	0.64	0.288 (U)	0.302 (U)
2/5/2019	0.637				0.873	0.431 (U)	0.307 (U)
2/6/2019		0.537	0.779	-0.0241 (U)			
8/19/2019						0.377 (U)	0.683
8/20/2019					0.774		
8/21/2019	0.643 (U)						
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)			
4/14/2020			0.922 (U)	0.643 (U)			
4/15/2020	0.538 (U)	0.64 (U)				0.449 (U)	
4/16/2020					0.865		0.603
8/24/2020							0.404 (U)
8/25/2020	0.502 (U)				0.976	0.851	
8/26/2020		0.221 (U)	1.28	1.31			
3/16/2021	0.722 (U)						
3/22/2021					1.04	0.942 (U)	0.497 (U)
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)			
10/5/2021	1.21			1.48			
10/6/2021						1.16 (U)	2.01
10/11/2021		6.52					
10/12/2021			1.02 (U)		1.61		

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.772				
2/6/2018			0.679				
4/23/2018			0.447 (U)				
6/27/2018			0.117 (U)				
8/7/2018			1.22				
10/22/2018			0.996				
12/4/2018			0.739				
2/5/2019			1.09				
8/20/2019			0.553 (U)				
4/14/2020		42.6		0.0962 (U)			
4/15/2020	0.419 (U)		0.182 (U)				0.231 (U)
6/1/2020		0.215 (U)					
8/25/2020	1.45		0.43 (U)				0.807
8/26/2020		0.265 (U)		0.413 (U)			
3/16/2021	0.405 (U)						
3/22/2021							0.58 (U)
3/23/2021		0.562 (U)		0.847 (U)			
3/24/2021			0.769 (U)				
10/6/2021					1.78		0.746 (U)
10/11/2021		0.202 (U)	2.38	1.09 (U)		1.29	
10/12/2021	0.383 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.643					
12/7/2017			1.04		0.885	0.394 (U)	0.895
2/6/2018		0.209 (U)	0.989		0.524		
2/8/2018						0.489	0.322 (U)
4/24/2018		0.596	0.405 (U)				
4/25/2018					0.341 (U)	-0.0902 (U)	0.0097 (U)
6/26/2018			1.03			0.245 (U)	0.587
6/27/2018		0.363 (U)			0.546		
8/6/2018			0.622				
8/7/2018		0.788			1.09	0.439 (U)	
8/8/2018							0.364 (U)
10/22/2018		0.749	1.06				
10/23/2018					1.01	0.243 (U)	0.703
12/3/2018		0.749	0.697			0.304 (U)	
12/4/2018							0.325 (U)
12/5/2018					0.876		
2/5/2019		0.299 (U)	0.467 (U)		0.551 (U)	0.196 (U)	
2/6/2019							0.0774 (U)
8/20/2019		0.709 (U)	0.814		0.206 (U)	-0.086 (U)	
8/21/2019							-0.0134 (U)
4/13/2020		0.942 (U)			1.19	0.0901 (U)	
4/15/2020			-0.0841 (U)	0.329 (U)			0.526 (U)
8/24/2020					0.482 (U)		
8/26/2020		0.177 (U)	0.26 (U)	0.839		0.416 (U)	0.691 (U)
3/16/2021					0.709 (U)		
3/17/2021						0.539 (U)	
3/22/2021		0.263 (U)					
3/23/2021							0.45 (U)
3/24/2021			0.664 (U)	0.725 (U)			
3/30/2021	0.185 (U)						
10/5/2021		3.21	1.75		1.44	1.36	1.27
10/11/2021				1.58			
10/12/2021	0.323 (U)						

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	7.45 (o)	0.226 (U)				
2/8/2018	0.549	0.071 (U)				
4/25/2018	0.65	0.569				
6/26/2018	0.436 (U)	0.43 (U)				
6/27/2018			0.188 (U)		0.259 (U)	0.231 (U)
7/18/2018			0.314 (U)		0.434	0.676
8/7/2018			0.279 (U)			
8/8/2018	0.486 (U)	0.656			0.763	0.496
9/5/2018			0.589		0.631	0.62
9/24/2018			0.772		0.588	-0.12 (U)
10/22/2018			0.621			
10/23/2018	0.319 (U)	0.395 (U)			0.383 (U)	0.352 (U)
12/3/2018			0.188 (U)		0.736	0.238 (U)
12/4/2018	0.875					
12/5/2018		0.52 (U)				
2/5/2019			0.274 (U)			
2/6/2019	0.378 (U)	0.244 (U)				
2/7/2019					0.0202 (U)	0.395 (U)
8/20/2019			0.663			
8/21/2019	0.552 (U)	1.53 (U)			0.442 (U)	-0.00256 (U)
4/13/2020			-0.129 (U)	0.472 (U)		
4/14/2020	0.641 (U)	0.119 (U)				
4/15/2020					0.432 (U)	0.000738 (U)
8/24/2020			0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)
8/26/2020	0.339 (U)	1.18				
3/16/2021					0.32 (U)	0.589 (U)
3/17/2021				0.756 (U)		
3/23/2021	0.662 (U)	0.694 (U)				
3/24/2021			0.245 (U)			
10/5/2021			2.07	1.13		
10/12/2021	0.291 (U)	0.311 (U)			0.963 (U)	1.57

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.1	0.09 (J)	0.06 (J)	<0.1			
2/6/2018	0.08 (J)						
2/7/2018		0.08 (J)	0.05 (J)				
2/8/2018				<0.1			
4/23/2018	0.07 (J)						
4/24/2018		0.08 (J)	0.05 (J)	<0.1			
6/26/2018	0.08 (J)						
6/27/2018		0.09 (J)	0.06 (J)	<0.1	0.18		
7/18/2018					0.23		
8/6/2018					0.23		
8/7/2018	0.07 (J)	0.04 (J)					
8/8/2018			0.06 (J)	<0.1			
9/5/2018					0.22		
9/24/2018					0.2		
10/22/2018	0.07 (J)	0.1					
10/23/2018			0.06 (J)	0.04 (J)			
10/24/2018					0.14	0.11	0.23
11/14/2018						0.1	0.2
11/28/2018						0.1	0.19
12/4/2018	0.04 (J)	0.07 (J)	<0.1				
12/5/2018				<0.1	0.07 (J)	0.11	0.19
12/18/2018						0.14	0.15
1/3/2019						0.16	0.19
1/24/2019						<0.1	0.168
2/5/2019	0.0525 (J)				<0.1	<0.1	0.192
2/6/2019		0.107	0.0678 (J)	<0.1			
2/26/2019	<0.1	0.0813 (J)					
2/27/2019			0.0985 (J)	<0.1			
2/28/2019					<0.1	<0.1	0.182
6/24/2019						<0.1 (D)	
8/19/2019						<0.1	0.187
8/20/2019					<0.1		
8/21/2019	<0.1						
8/22/2019		0.084 (J)	<0.1	<0.1			
4/14/2020			0.0878 (J)	<0.1			
4/15/2020	<0.1	0.112				<0.1	
4/16/2020					<0.1		0.166
8/24/2020							0.163
8/25/2020	<0.1				<0.1	0.0863 (J)	
8/26/2020		0.0997 (J)	<0.1	<0.1			
3/16/2021	<0.1						
3/22/2021					<0.1	<0.1	0.18
3/23/2021		0.101	0.0819 (J)	<0.1			
10/5/2021	0.0601 (J)			<0.1			
10/6/2021						<0.1	0.175
10/11/2021		0.201					
10/12/2021			0.134		<0.1		

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.3				
2/6/2018			0.27				
4/23/2018			0.19				
6/27/2018			0.28				
8/7/2018			0.24				
10/22/2018			0.24				
12/4/2018			0.15				
2/5/2019			0.207				
2/26/2019			0.264				
8/20/2019			0.252				
4/14/2020		<0.1		0.125			
4/15/2020	<0.1		0.21				2.51
8/25/2020	<0.1		0.273				2.4
8/26/2020		<0.1		0.103			
3/16/2021	<0.1						
3/22/2021							2.33
3/23/2021		<0.1		0.108			
3/24/2021			0.194				
10/6/2021					8.34		2.56
10/11/2021		0.0779 (J)	0.283	0.127		1.43	
10/12/2021	<0.1						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.13					
12/7/2017			0.25		0.06 (J)	0.06 (J)	0.09 (J)
2/6/2018		0.08 (J)	0.24		0.05 (J)		
2/8/2018						0.04 (J)	0.07 (J)
4/24/2018		0.05 (J)	0.2				
4/25/2018					0.05 (J)	0.04 (J)	0.07 (J)
6/26/2018			0.22			0.05 (J)	0.09 (J)
6/27/2018		0.07 (J)			0.06 (J)		
8/6/2018			0.22				
8/7/2018		0.09 (J)			0.06 (J)	0.05 (J)	
8/8/2018							0.1
10/22/2018		0.11	0.24				
10/23/2018					0.07 (J)	0.06 (J)	0.1
12/3/2018		0.08 (J)	0.22			<0.1	
12/4/2018							0.06 (J)
12/5/2018					0.04 (J)		
2/5/2019		0.064 (J)	0.259		0.0651 (J)	0.0581 (J)	
2/6/2019							<0.1
2/25/2019		<0.1					
2/26/2019			0.246			0.0816 (J)	
2/27/2019					0.0578 (J)		0.0824 (J)
6/18/2019		0.0664 (J)					
8/20/2019		0.0592 (J)	0.197		0.0567 (J)	<0.1	
8/21/2019							0.068 (J)
4/13/2020		<0.1			0.0688 (J)	<0.1	
4/15/2020			0.238	0.218			0.0775 (J)
8/24/2020					0.0607 (J)		
8/26/2020		<0.1	0.251	0.217		<0.1	<0.1
3/16/2021					0.065 (J)		
3/17/2021						<0.1	
3/22/2021		<0.1					
3/23/2021							<0.1
3/24/2021			0.227	0.212			
3/30/2021	6.09						
10/5/2021		<0.1	0.214		0.122	<0.1	0.0933 (J)
10/11/2021				0.23			
10/12/2021	5.97						

Time Series

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.14	0.12				
2/8/2018	0.11					
2/12/2018		0.11				
4/25/2018	0.09 (J)	0.12				
6/26/2018	0.1	0.13				
6/27/2018			0.13		0.05 (J)	0.04 (J)
7/18/2018			0.11		0.04 (J)	0.04 (J)
8/7/2018			0.11			
8/8/2018	0.1	0.12			0.04 (J)	0.04 (J)
9/5/2018			0.13		0.04 (J)	0.04 (J)
9/24/2018			0.13		0.04 (J)	0.04 (J)
10/22/2018			0.13			
10/23/2018	0.11	0.13			0.04 (J)	0.04 (J)
12/3/2018			0.08 (J)		<0.1	<0.1
12/4/2018	0.08 (J)					
12/5/2018		0.04 (J)				
2/5/2019			0.0934 (J)			
2/6/2019	<0.1	<0.1				
2/7/2019					<0.1	<0.1
2/25/2019			<0.1		<0.1	<0.1
2/27/2019	0.108	0.147				
8/20/2019			0.0889 (J)			
8/21/2019	0.0648 (J)	0.0984 (J)			<0.1	<0.1
4/13/2020			0.103	<0.1		
4/14/2020	0.0845 (J)	0.133				
4/15/2020					<0.1	<0.1
8/24/2020			0.114	<0.1	<0.1	<0.1
8/26/2020	0.0732 (J)	0.13				
3/16/2021					<0.1	<0.1
3/17/2021				<0.1		
3/23/2021	0.0802 (J)	0.132				
3/24/2021			0.0725 (J)			
10/5/2021			<0.1	<0.1		
10/12/2021	0.123	0.147			<0.1	<0.1

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	<0.0002			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				<0.0002			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	<0.0002			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	<0.0002	0.00158 (J)		
7/18/2018					0.00152 (J)		
8/6/2018					0.00143 (J)		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	<0.0002			
9/5/2018					0.00118 (J)		
9/24/2018					0.00156 (J)		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	<0.0002			
10/24/2018					0.00121 (J)	<0.0002	<0.0002
11/14/2018						<0.0002	<0.0002
11/28/2018						<0.0002	<0.0002
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				<0.0002	0.00117 (J)	<0.0002	<0.0002
12/18/2018						<0.0002	<0.0002
1/3/2019						0.001 (J)	<0.0002
1/24/2019						0.00114 (J)	<0.0002
2/5/2019	<0.0002				0.00156 (J)	0.00135 (J)	<0.0002
2/6/2019		<0.0002	<0.0002	<0.0002			
6/24/2019						0.00125 (J)	
8/19/2019						<0.0002	<0.0002
8/20/2019					0.00176 (J)		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	<0.0002			
4/14/2020			<0.0002	<0.0002			
4/15/2020	<0.0002	<0.0002				<0.0002	
4/16/2020					0.00258 (J)		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				0.0018 (J)	0.0011 (J)	
8/26/2020		<0.0002	<0.0002	<0.0002			
3/16/2021	<0.0002						
3/22/2021					0.00143	0.0016	<0.0002
3/23/2021		<0.0002	<0.0002	<0.0002			
10/5/2021	<0.0002			<0.0002			
10/6/2021						0.00116	<0.0002
10/11/2021		<0.0002					
10/12/2021			<0.0002		0.00156		

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0002				
2/6/2018			<0.0002				
4/23/2018			<0.0002				
6/27/2018			<0.0002				
8/7/2018			<0.0002				
10/22/2018			<0.0002				
12/4/2018			<0.0002				
2/5/2019			<0.0002				
8/20/2019			<0.0002				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		<0.0002				<0.0002
8/25/2020	<0.0002		<0.0002				<0.0002
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							<0.0002
3/23/2021		0.000201 (J)		<0.0002			
3/24/2021			<0.0002				
10/6/2021					0.00022		<0.0002
10/11/2021		0.00016 (J)	9E-05 (J)	8E-05 (J)		<0.0002	
10/12/2021	<0.0002						

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		<0.0002					
3/23/2021							<0.0002
3/24/2021			<0.0002	<0.0002			
3/30/2021	<0.0002						
10/5/2021		<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
10/11/2021				<0.0002			
10/12/2021	<0.0002						

Time Series

Constituent: Lead (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					0.00013 (J)	8.35E-05 (J)
3/17/2021				0.000191 (J)		
3/23/2021	<0.0002	<0.0002				
3/24/2021			<0.0002			
10/5/2021			<0.0002	0.00012 (J)		
10/12/2021	<0.0002	<0.0002			<0.0002	0.00012 (J)

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.02	<0.02	<0.02	<0.02			
2/6/2018	<0.02						
2/7/2018		<0.02	<0.02				
2/8/2018				<0.02			
4/23/2018	<0.02						
4/24/2018		<0.02	<0.02	<0.02			
6/26/2018	<0.02						
6/27/2018		<0.02	<0.02	<0.02	<0.02		
7/18/2018					<0.02		
8/6/2018					<0.02		
8/7/2018	<0.02	<0.02					
8/8/2018			<0.02	<0.02			
9/5/2018					<0.02		
9/24/2018					<0.02		
10/22/2018	<0.02	<0.02					
10/23/2018			<0.02	<0.02			
10/24/2018					<0.02	<0.02	<0.02
11/14/2018						<0.02	<0.02
11/28/2018						<0.02	0.0111 (J)
12/4/2018	<0.02	<0.02	<0.02				
12/5/2018				<0.02	<0.02	<0.02	0.0124 (J)
12/18/2018						<0.02	0.0121 (J)
1/3/2019						<0.02	0.0137 (J)
1/24/2019						<0.02	0.0134 (J)
2/5/2019	<0.02				<0.02	<0.02	0.0126 (J)
2/6/2019		<0.02	<0.02	<0.02			
6/24/2019						<0.02	
8/19/2019						<0.02	<0.02
8/20/2019					<0.02		
8/21/2019	<0.02						
8/22/2019		<0.02	<0.02	<0.02			
4/14/2020			<0.02	<0.02			
4/15/2020	<0.02	<0.02				<0.02	
4/16/2020					<0.02		0.0127 (J)
8/24/2020							<0.02
8/25/2020	<0.02				<0.02	<0.02	
8/26/2020		<0.02	<0.02	<0.02			
3/16/2021	<0.02						
3/22/2021					<0.02	<0.02	0.0083 (J)
3/23/2021		<0.02	<0.02	<0.02			
10/5/2021	<0.02			<0.02			
10/6/2021						<0.02	0.00881 (J)
10/11/2021		<0.02					
10/12/2021			<0.02		<0.02		

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.092				
2/6/2018			0.0817				
4/23/2018			0.051				
6/27/2018			0.0734				
8/7/2018			0.0764				
10/22/2018			0.0804				
12/4/2018			0.0474				
2/5/2019			0.0545				
8/20/2019			0.0583				
4/14/2020		<0.02		<0.02			
4/15/2020	<0.02		0.0406				0.0783
7/1/2020							0.069
8/25/2020	<0.02		0.041				0.0666
8/26/2020		<0.02		<0.02			
3/16/2021	<0.02						
3/22/2021							0.0666
3/23/2021		<0.02		<0.02			
3/24/2021			0.0318				
10/6/2021					0.227		0.0685
10/11/2021		<0.02	0.0225	<0.02		0.0544	
10/12/2021	<0.02						

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.02					
12/7/2017			<0.02		<0.02	<0.02	<0.02
2/6/2018		<0.02	<0.02		<0.02		
2/8/2018						<0.02	<0.02
4/24/2018		<0.02	<0.02				
4/25/2018					<0.02	<0.02	<0.02
6/26/2018			<0.02			<0.02	<0.02
6/27/2018		<0.02			<0.02		
8/6/2018			<0.02				
8/7/2018		<0.02			<0.02	<0.02	
8/8/2018							<0.02
10/22/2018		<0.02	<0.02				
10/23/2018					<0.02	<0.02	<0.02
12/3/2018		<0.02	<0.02			<0.02	
12/4/2018							<0.02
12/5/2018					<0.02		
2/5/2019		<0.02	<0.02		<0.02	<0.02	
2/6/2019							<0.02
6/18/2019		<0.02					
8/20/2019		<0.02	<0.02		<0.02	<0.02	
8/21/2019							<0.02
4/13/2020		<0.02			<0.02	<0.02	
4/15/2020			<0.02	0.0219			<0.02
8/24/2020					<0.02		
8/26/2020		<0.02	<0.02	0.0203		<0.02	<0.02
3/16/2021					<0.02		
3/17/2021						<0.02	
3/22/2021		<0.02					
3/23/2021							<0.02
3/24/2021			<0.02	0.0203			
3/30/2021	0.13						
10/5/2021		<0.02	<0.02		<0.02	<0.02	<0.02
10/11/2021				0.0198 (J)			
10/12/2021	0.129						

Time Series

Constituent: Lithium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.02	<0.02				
2/8/2018	<0.02	<0.02				
4/25/2018	<0.02	<0.02				
6/26/2018	<0.02	<0.02				
6/27/2018			<0.02		<0.02	<0.02
7/18/2018			<0.02		<0.02	<0.02
8/7/2018			<0.02			
8/8/2018	<0.02	<0.02			<0.02	<0.02
9/5/2018			<0.02		<0.02	<0.02
9/24/2018			<0.02		<0.02	<0.02
10/22/2018			<0.02			
10/23/2018	<0.02	<0.02			<0.02	<0.02
12/3/2018			<0.02		<0.02	<0.02
12/4/2018	<0.02					
12/5/2018		<0.02				
2/5/2019			<0.02			
2/6/2019	<0.02	<0.02				
2/7/2019					<0.02	<0.02
8/20/2019			<0.02			
8/21/2019	<0.02	<0.02			<0.02	<0.02
4/13/2020			<0.02	<0.02		
4/14/2020	<0.02	<0.02				
4/15/2020					<0.02	<0.02
8/24/2020			<0.02	<0.02	<0.02	<0.02
8/26/2020	<0.02	<0.02				
3/16/2021					<0.02	<0.02
3/17/2021				<0.02		
3/23/2021	<0.02	<0.02				
3/24/2021			<0.02			
10/5/2021			<0.02	<0.02		
10/12/2021	<0.02	<0.02			<0.02	<0.02

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0005	<0.0005	<0.0005	<0.0005			
2/6/2018	<0.0005						
2/7/2018		<0.0005	<0.0005				
2/8/2018				<0.0005			
4/23/2018	<0.0005						
4/24/2018		<0.0005	<0.0005	<0.0005			
6/26/2018	<0.0005						
6/27/2018		<0.0005	<0.0005	<0.0005	0.000661		
7/18/2018					0.000398 (J)		
8/6/2018					0.00042 (J)		
8/7/2018	<0.0005	<0.0005					
8/8/2018			<0.0005	<0.0005			
9/5/2018					0.00037 (J)		
9/24/2018					0.000329 (J)		
10/22/2018	<0.0005	<0.0005					
10/23/2018			<0.0005	<0.0005			
10/24/2018					<0.0005	<0.0005	<0.0005
11/14/2018						<0.0005	<0.0005
11/28/2018						<0.0005	<0.0005
12/4/2018	<0.0005	0.000302 (J)	<0.0005				
12/5/2018				<0.0005	0.000253 (J)	<0.0005	<0.0005
12/18/2018						<0.0005	<0.0005
1/3/2019						<0.0005	<0.0005
1/24/2019						0.000411 (J)	<0.0005
2/5/2019	<0.0005				0.000664	0.000473 (J)	<0.0005
2/6/2019		<0.0005	<0.0005	<0.0005			
8/19/2019						<0.0005	<0.0005
8/20/2019					0.000301 (J)		
8/21/2019	<0.0005						
8/22/2019		<0.0005	<0.0005	<0.0005			
4/14/2020			<0.0005	<0.0005			
4/15/2020	<0.0005	<0.0005				<0.0005	
4/16/2020					0.000558		<0.0005
8/24/2020							<0.0005
8/25/2020	<0.0005				<0.0005	<0.0005	
8/26/2020		<0.0005	<0.0005	<0.0005			
3/16/2021	<0.0005						
3/22/2021					0.000363 (J)	0.000775	<0.0005
3/23/2021		<0.0005	<0.0005	<0.0005			
10/5/2021	<0.0005			<0.0005			
10/6/2021						<0.0005	<0.0005
10/11/2021		<0.0005					
10/12/2021			<0.0005		<0.0005		

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0005				
2/6/2018			<0.0005				
4/23/2018			<0.0005				
6/27/2018			<0.0005				
8/7/2018			<0.0005				
10/22/2018			<0.0005				
12/4/2018			<0.0005				
2/5/2019			<0.0005				
8/20/2019			<0.0005				
4/14/2020		<0.0005		<0.0005			
4/15/2020	<0.0005		<0.0005				<0.0005
8/25/2020	<0.0005		<0.0005				<0.0005
8/26/2020		<0.0005		<0.0005			
3/16/2021	<0.0005						
3/22/2021							<0.0005
3/23/2021		<0.0005		<0.0005			
3/24/2021			<0.0005				
10/6/2021					<0.0005		<0.0005
10/11/2021		<0.0005	<0.0005	<0.0005		<0.0005	
10/12/2021	<0.0005						

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0005					
12/7/2017			<0.0005		<0.0005	<0.0005	<0.0005
2/6/2018		<0.0005	<0.0005		<0.0005		
2/8/2018						<0.0005	<0.0005
4/24/2018		<0.0005	<0.0005				
4/25/2018					<0.0005	<0.0005	<0.0005
6/26/2018			<0.0005			<0.0005	<0.0005
6/27/2018		<0.0005			<0.0005		
8/6/2018			<0.0005				
8/7/2018		<0.0005			<0.0005	<0.0005	
8/8/2018							<0.0005
10/22/2018		<0.0005	<0.0005				
10/23/2018					<0.0005	<0.0005	<0.0005
12/3/2018		<0.0005	<0.0005			<0.0005	
12/4/2018							0.00034 (J)
12/5/2018					<0.0005		
2/5/2019		<0.0005	<0.0005		<0.0005	<0.0005	
2/6/2019							<0.0005
8/20/2019		<0.0005	<0.0005		<0.0005	<0.0005	
8/21/2019							<0.0005
4/13/2020		<0.0005			<0.0005	<0.0005	
4/15/2020			<0.0005	<0.0005			<0.0005
8/24/2020					<0.0005		
8/26/2020		<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/16/2021					<0.0005		
3/17/2021						<0.0005	
3/22/2021		<0.0005					
3/23/2021							<0.0005
3/24/2021			<0.0005	<0.0005			
3/30/2021	<0.0005						
10/5/2021		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
10/11/2021				<0.0005			
10/12/2021	<0.0005						

Time Series

Constituent: Mercury (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0005	<0.0005				
2/8/2018	<0.0005	<0.0005				
4/25/2018	<0.0005	<0.0005				
6/26/2018	<0.0005	<0.0005				
6/27/2018			<0.0005		<0.0005	<0.0005
7/18/2018			<0.0005		<0.0005	<0.0005
8/7/2018			<0.0005			
8/8/2018	<0.0005	<0.0005			<0.0005	<0.0005
9/5/2018			<0.0005		<0.0005	<0.0005
9/24/2018			<0.0005		<0.0005	<0.0005
10/22/2018			<0.0005			
10/23/2018	<0.0005	<0.0005			<0.0005	<0.0005
12/3/2018			<0.0005		<0.0005	<0.0005
12/4/2018	0.000284 (J)					
12/5/2018		<0.0005				
2/5/2019			<0.0005			
2/6/2019	<0.0005	<0.0005				
2/7/2019					<0.0005	<0.0005
8/20/2019			<0.0005			
8/21/2019	<0.0005	<0.0005			<0.0005	<0.0005
4/13/2020			<0.0005	<0.0005		
4/14/2020	<0.0005	<0.0005				
4/15/2020					<0.0005	<0.0005
8/24/2020			<0.0005	<0.0005	<0.0005	<0.0005
8/26/2020	<0.0005	<0.0005				
3/16/2021					<0.0005	<0.0005
3/17/2021				<0.0005		
3/23/2021	<0.0005	<0.0005				
3/24/2021			<0.0005			
10/5/2021			<0.0005	<0.0005		
10/12/2021	<0.0005	<0.0005			<0.0005	<0.0005

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	<0.0002			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				<0.0002			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	<0.0002			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	<0.0002	<0.0002		
7/18/2018					<0.0002		
8/6/2018					<0.0002		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	<0.0002			
9/5/2018					<0.0002		
9/24/2018					<0.0002		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	<0.0002			
10/24/2018					<0.0002	<0.0002	0.00507 (J)
11/14/2018						<0.0002	0.00358 (J)
11/28/2018						<0.0002	0.00322 (J)
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				<0.0002	<0.0002	<0.0002	0.00256 (J)
12/18/2018						<0.0002	0.00215 (J)
1/3/2019						<0.0002	0.00257 (J)
1/24/2019						<0.0002	0.00211 (J)
2/5/2019	<0.0002				<0.0002	<0.0002	0.00205 (J)
2/6/2019		<0.0002	<0.0002	<0.0002			
6/24/2019						<0.0002	
8/19/2019						<0.0002	<0.0002
8/20/2019					<0.0002		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	<0.0002			
4/14/2020			<0.0002	<0.0002			
4/15/2020	<0.0002	<0.0002				<0.0002	
4/16/2020					<0.0002		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				<0.0002	<0.0002	
8/26/2020		<0.0002	<0.0002	<0.0002			
3/16/2021	<0.0002						
3/22/2021					<0.0002	<0.0002	0.000723
3/23/2021		0.000204	0.000124 (J)	<0.0002			
10/5/2021	<0.0002			<0.0002			
10/6/2021						<0.0002	0.00045
10/11/2021		0.00045					
10/12/2021			0.00015 (J)		<0.0002		

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.0254				
2/6/2018			0.0239				
4/23/2018			0.0165				
6/27/2018			0.0302				
8/7/2018			0.0209				
10/22/2018			0.0198				
12/4/2018			0.0118				
2/5/2019			0.0196				
8/20/2019			0.027				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		0.0202				<0.0002
8/25/2020	<0.0002		0.0269				0.00323 (J)
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							0.00386
3/23/2021		<0.0002		0.000481			
3/24/2021			0.0164				
10/6/2021					0.00107		0.00363
10/11/2021		0.00012 (J)	0.0204	0.00031		0.00538	
10/12/2021	<0.0002						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		<0.0002					
3/23/2021							<0.0002
3/24/2021			0.00118	0.00188			
3/30/2021	0.000673						
10/5/2021		<0.0002	0.00111		0.00015 (J)	<0.0002	0.0001 (J)
10/11/2021				0.00173			
10/12/2021	0.00156						

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					<0.0002	<0.0002
3/17/2021				<0.0002		
3/23/2021	0.000357	0.00027				
3/24/2021			9.88E-05 (J)			
10/5/2021			7E-05 (J)	0.00028		
10/12/2021	0.00032	0.00018 (J)			<0.0002	<0.0002

Time Series

Constituent: pH (pH) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.5	6.83	6.81	5.6			
2/6/2018	6.48						
2/7/2018		6.82	6.74				
2/8/2018				5.44			
4/23/2018	6.36						
4/24/2018		6.74	6.62	5.41			
6/26/2018	6.32						
6/27/2018		6.67	6.69	5.45	3.95		
7/18/2018					4.02		
8/6/2018					4.07		
8/7/2018	6.32	6.72					
8/8/2018			6.67	5.46			
9/5/2018					4.07		
9/24/2018					4.07		
10/22/2018	6.2	6.73					
10/23/2018			6.73	5.47			
10/24/2018					4.1	5.27	7.92
11/14/2018						4.99	8.23
11/28/2018						4.74	8.95
12/4/2018	6.31	6.77	6.67				
12/5/2018				5.45	4.1	4.76	8.77
12/18/2018						4.57	8.99
1/3/2019						4.56	9.35
1/24/2019						4.45	9.42
2/5/2019	6.1				4.02	4.3	9.23
2/6/2019		6.67	6.58	5.31			
2/26/2019	6.11	6.77					
2/27/2019			6.56	5.4			
2/28/2019					3.94 (E)	4.35	9.48
8/19/2019						4.57	7.93
8/20/2019					4		
8/21/2019	6.01						
8/22/2019		6.37	6.26	5.35			
4/14/2020			6.63	5.39			
4/15/2020	5.65	6.85				4.49	
4/16/2020					3.93		8.1
8/24/2020							8.17
8/25/2020	6				4.03	4.2	
8/26/2020		6.73	6.38	5.63			
3/16/2021	5.87						
3/22/2021					3.25	3.45	7.85
3/23/2021		6.87	6.58	5.5			
10/5/2021	5.79			5.19			
10/6/2021						4.16	7.92
10/11/2021		6.72					
10/12/2021			6.66		4.04		

Time Series

Constituent: pH (pH) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			6.61				
2/6/2018			6.66				
4/23/2018			6.54				
6/27/2018			6.63				
8/7/2018			6.57				
10/22/2018			6.55				
12/4/2018			6.52				
2/5/2019			6.47				
2/26/2019			6.54				
8/20/2019			6.3				
4/14/2020		5.79		6.02			
4/15/2020	5.1		6.45				8.6
7/1/2020							8.36
8/25/2020	5.13		6.65				8.43
8/26/2020		6.33		6.36			
3/16/2021	5.08						
3/22/2021							8.34
3/23/2021		5.88		6.38			
3/24/2021			6.49				
10/6/2021					8.53		8.36
10/11/2021		6.08	6.59	6.36		8.13	
10/12/2021	5.12						

Time Series

Constituent: pH (pH) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		6.54					
12/7/2017			6.73		6.32	6.38	6.62
2/6/2018		6.39	6.76		6.27		
2/8/2018						6.29	6.39
4/24/2018		6.02	6.66				
4/25/2018					6.14	6.15	6.17
6/26/2018			6.61			6.09	6.38
6/27/2018		6.07			6.15		
8/6/2018			6.68				
8/7/2018		6.28			6.18	6.16	
8/8/2018							6.56
10/22/2018		6.3	6.63				
10/23/2018					6.15	6.1	6.54
12/3/2018		6.38	6.67			6.09	
12/4/2018							6.33
12/5/2018					6.15		
2/5/2019		5.83	6.63		6.08	6.04	
2/6/2019							6.13
2/25/2019		5.93					
2/26/2019			6.64			6.17	
2/27/2019					6.11		6.12
8/20/2019		5.73	6.33		6.11	5.4	
8/21/2019							5.97
4/13/2020		5.83			6.18	5.82	
4/15/2020			6.77	7.93			6.16
8/24/2020					6.11		
8/26/2020		5.87	6.68	7.83		5.96	6.11
3/16/2021					6.22		
3/17/2021						5.92	
3/22/2021		5.51					
3/23/2021							6.04
3/24/2021			6.86	8.01			
3/30/2021	8.52						
10/5/2021		5.76	6.58		6.24	5.74	6.06
10/11/2021				7.82			
10/12/2021	8.62						

Time Series

Constituent: pH (pH) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	6.81	6.93				
2/8/2018	6.73	6.96				
2/12/2018		6.88				
4/25/2018	6.61	6.89				
6/26/2018	6.59	6.85				
6/27/2018			6.79		5.81	5.44
7/18/2018			6.8		5.74	5.58
8/7/2018			6.73			
8/8/2018	6.6	6.94			5.7	5.55
9/5/2018			6.75		5.61	5.56
9/24/2018			6.83		5.59	5.57
10/22/2018			6.76			
10/23/2018	6.64	6.93			5.6	5.55
12/3/2018			6.6		5.73	5.6
12/4/2018	6.68					
12/5/2018		6.94				
2/5/2019			6.66			
2/6/2019	6.62	6.73				
2/7/2019					5.44	5.51
2/25/2019			6.6		5.46	5.54
2/27/2019	6.56	6.85				
8/20/2019			6.3			
8/21/2019	6.16	6.61			5.13	5.44
4/13/2020			6.66	5.84		
4/14/2020	6.49	7.02				
4/15/2020					5.31	5.52
8/24/2020			6.64	6	4.65	5.38
8/26/2020	6.29	6.75				
3/16/2021					5.47	5.56
3/17/2021				5.34		
3/23/2021	6.47	6.85				
3/24/2021			5.85			
10/5/2021			6.46	5.72		
10/12/2021	6.61	6.9			5.33	5.41

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	<0.00102		
7/18/2018					<0.00102		
8/6/2018					<0.00102		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					<0.00102		
9/24/2018					<0.00102		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					<0.00102	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						<0.00102	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	0.00208 (J)	0.00349 (J)	<0.00102
12/18/2018						0.00395 (J)	<0.00102
1/3/2019						0.00488 (J)	<0.00102
1/24/2019						0.00707 (J)	<0.00102
2/5/2019	<0.00102				0.00387 (J)	0.00938 (J)	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						0.00563 (J)	
8/19/2019						0.00316 (J)	<0.00102
8/20/2019					0.00328 (J)		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				0.00434 (J)	
4/16/2020					0.00608 (J)		<0.00102
8/24/2020							<0.00102
8/25/2020	<0.00102				0.00247 (J)	0.00262 (J)	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	<0.00102						
3/22/2021					0.00488	0.0134	<0.00102
3/23/2021		<0.00102	<0.00102	<0.00102			
10/5/2021	<0.00102			<0.00102			
10/6/2021						0.00262	<0.00102
10/11/2021		<0.00102					
10/12/2021			<0.00102		0.00287		

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	0.000935 (J)						
3/22/2021							<0.00102
3/23/2021		<0.00102		<0.00102			
3/24/2021			<0.00102				
10/6/2021					<0.00102		<0.00102
10/11/2021		<0.00102	<0.00102	<0.00102		<0.00102	
10/12/2021	0.00068 (J)						

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		<0.00102					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					<0.00102		
3/17/2021						<0.00102	
3/22/2021		<0.00102					
3/23/2021							<0.00102
3/24/2021			<0.00102	<0.00102			
3/30/2021	<0.00102						
10/5/2021		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
10/11/2021				<0.00102			
10/12/2021	<0.00102						

Time Series

Constituent: Selenium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					<0.00102	<0.00102
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					<0.00102	<0.00102
3/17/2021				<0.00102		
3/23/2021	<0.00102	<0.00102				
3/24/2021			<0.00102			
10/5/2021			<0.00102	<0.00102		
10/12/2021	<0.00102	<0.00102			<0.00102	<0.00102

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	650	11	83	200			
2/6/2018	560						
2/7/2018		19	84				
2/8/2018				200			
4/23/2018	640						
4/24/2018		27	98	210			
6/26/2018	670						
6/27/2018		<1	95	240	120		
7/18/2018					120		
8/6/2018					110		
8/7/2018	660	<1					
8/8/2018			110	260			
9/5/2018					86		
9/24/2018					80		
10/22/2018	580	<1					
10/23/2018			78	280			
10/24/2018					68	44	16
11/14/2018						44	13
11/28/2018						46	11
12/4/2018	580	11	97				
12/5/2018				280	54	51	12
12/18/2018						76	11
1/3/2019						94	10
1/24/2019						135	10.2
2/5/2019	702				126	183	10.4
2/6/2019		16.8	113	239			
2/26/2019	748	38.4					
2/27/2019			135	257			
2/28/2019					207	192	9.86
6/24/2019						129 (D)	
8/19/2019						66.6	8.74
8/20/2019					106		
8/21/2019	708						
8/22/2019		6.74	305	339			
4/14/2020			146	155			
4/15/2020	647	50.7				92.8	
4/16/2020					191		11.5
8/24/2020							10
8/25/2020	642				98.4	74.1	
8/26/2020		10.5	280	282			
3/16/2021	593						
3/22/2021					83.8	128	10.6
3/23/2021		60.1	135	160			
10/5/2021	567			195			
10/6/2021						93.5	10.2
10/11/2021		7.75					
10/12/2021			142		95.7		

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			210				
2/6/2018			190				
4/23/2018			140				
6/27/2018			130				
8/7/2018			150				
10/22/2018			160				
12/4/2018			170				
2/5/2019			145				
2/26/2019			148				
8/20/2019			110				
4/14/2020		75.3		135			
4/15/2020	67.1		116				4.18
8/25/2020	52.6		114				4.83
8/26/2020		72.9		112			
3/16/2021	18.5						
3/22/2021							2.04
3/23/2021		71.8		168			
3/24/2021			101				
10/6/2021					8.35		2.44
10/11/2021		61.7	112	174		13.8	
10/12/2021	36.7						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		250					
12/7/2017			<1		19	10	14
2/6/2018		230	<1		20		
2/8/2018						11	10
4/24/2018		260	<1				
4/25/2018					22	13	11
6/26/2018			<1			11	11
6/27/2018		230			18		
8/6/2018			<1				
8/7/2018		200			20	12	
8/8/2018							13
10/22/2018		190	<1				
10/23/2018					18	11	13
12/3/2018		200	<1			12	
12/4/2018							9.8
12/5/2018					20		
2/5/2019		263	5.38		24.3	13.9	
2/6/2019							10.8
2/25/2019		246					
2/26/2019			5.1			14.1	
2/27/2019					24.7		8.98
6/18/2019		245					
8/20/2019		222	7.34		21.3	12.3	
8/21/2019							11.8
4/13/2020		256			21.9	13.9	
4/15/2020			17.2	1.25			7.95
8/24/2020					21.2		
8/26/2020		246	15.5	1.21		13.1	9.19
3/16/2021					18.8		
3/17/2021						13.7	
3/22/2021		254					
3/23/2021							8.08
3/24/2021			19.9	1.39			
3/30/2021	10.3						
10/5/2021		228	37.8		14.4	14.2	9.19
10/11/2021				1.7			
10/12/2021	15.2						

Time Series

Constituent: Sulfate (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	6.5	9				
2/8/2018	8.9					
2/12/2018		8.3				
4/25/2018	7.9	12				
6/26/2018	7.5	8.5				
6/27/2018			2.2 (J)		<1	<1
7/18/2018			2.5 (J)		<1	<1
8/7/2018			<1			
8/8/2018	7.3	6.7			<1	<1
9/5/2018			1.4 (J)		<1	<1
9/24/2018			<1		<1	<1
10/22/2018			1.7 (J)			
10/23/2018	7.8	9.4			<1	<1
12/3/2018			2.1 (J)		<1	<1
12/4/2018	8.2					
12/5/2018		7.8				
2/5/2019			3.99			
2/6/2019	9.53	17				
2/7/2019					0.639 (J)	1.69
2/25/2019			4.01		<1	1.53
2/27/2019	8.25	12.4				
8/20/2019			3.73			
8/21/2019	10.8	11.3			1.21	1.62
4/13/2020			3.83	1.48		
4/14/2020	12.5	15.9				
4/15/2020					0.554 (J)	1.68
8/24/2020			4.16	3.88	<1	1.31
8/26/2020	16.1	12.9				
3/16/2021					1.02	1.7
3/17/2021				1.64		
3/23/2021	9.21	15.7				
3/24/2021			2.88			
10/5/2021			2.17	5.29		
10/12/2021	16	18			0.895 (J)	1.34

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	<0.0002			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				<0.0002			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	<0.0002			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	<0.0002	<0.0002		
7/18/2018					<0.0002		
8/6/2018					<0.0002		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	<0.0002			
9/5/2018					<0.0002		
9/24/2018					<0.0002		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	<0.0002			
10/24/2018					<0.0002	<0.0002	<0.0002
11/14/2018						<0.0002	<0.0002
11/28/2018						<0.0002	<0.0002
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				<0.0002	<0.0002	<0.0002	<0.0002
12/18/2018						<0.0002	<0.0002
1/3/2019						<0.0002	<0.0002
1/24/2019						<0.0002	<0.0002
2/5/2019	<0.0002				<0.0002	<0.0002	<0.0002
2/6/2019		<0.0002	<0.0002	<0.0002			
6/24/2019						<0.0002	
8/19/2019						<0.0002	<0.0002
8/20/2019					<0.0002		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	<0.0002			
4/14/2020			<0.0002	<0.0002			
4/15/2020	<0.0002	<0.0002				<0.0002	
4/16/2020					<0.0002		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				<0.0002	<0.0002	
8/26/2020		<0.0002	<0.0002	<0.0002			
3/16/2021	0.000112 (J)						
3/22/2021					<0.0002	<0.0002	<0.0002
3/23/2021		<0.0002	<0.0002	<0.0002			
10/5/2021	<0.0002			<0.0002			
10/6/2021						<0.0002	<0.0002
10/11/2021		<0.0002					
10/12/2021			<0.0002		<0.0002		

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0002				
2/6/2018			<0.0002				
4/23/2018			<0.0002				
6/27/2018			<0.0002				
8/7/2018			<0.0002				
10/22/2018			0.000213 (J)				
12/4/2018			<0.0002				
2/5/2019			0.000256 (J)				
8/20/2019			0.000322 (J)				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		0.000318 (J)				<0.0002
8/25/2020	<0.0002		0.000347 (J)				<0.0002
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							<0.0002
3/23/2021		<0.0002		0.000145 (J)			
3/24/2021			0.00037				
10/6/2021					<0.0002		<0.0002
10/11/2021		<0.0002	0.00029	0.00013 (J)		<0.0002	
10/12/2021	<0.0002						

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		0.000121 (J)					
3/23/2021							<0.0002
3/24/2021			<0.0002	<0.0002			
3/30/2021	<0.0002						
10/5/2021		0.00014 (J)	<0.0002		<0.0002	<0.0002	<0.0002
10/11/2021				<0.0002			
10/12/2021	<0.0002						

Time Series

Constituent: Thallium (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					<0.0002	<0.0002
3/17/2021				<0.0002		
3/23/2021	<0.0002	<0.0002				
3/24/2021			<0.0002			
10/5/2021			<0.0002	<0.0002		
10/12/2021	<0.0002	<0.0002			<0.0002	<0.0002

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1300	215	312	371			
2/6/2018	1310						
2/7/2018		237	323				
2/8/2018				367			
4/23/2018	1210						
4/24/2018		242	324	365			
6/26/2018	1250						
6/27/2018		194	333	421	219		
7/18/2018					195		
8/6/2018					175		
8/7/2018	1220	195					
8/8/2018			346	479			
9/5/2018					153		
9/24/2018					127		
10/22/2018	1150	184					
10/23/2018			311	507			
10/24/2018					125	107	184
11/14/2018						96.7	170
11/28/2018						102	167
12/4/2018	1090	215	343				
12/5/2018				479	101	103	185
12/18/2018						126	164
1/3/2019						191	167
1/24/2019						212	137
2/5/2019	1200				180	269	138
2/6/2019		208	317	399			
2/26/2019	1210	252					
2/27/2019			360	422			
2/28/2019					287	261	140
6/24/2019						203.5 (D)	
8/19/2019						121	240
8/20/2019					265		
8/21/2019	1200						
8/22/2019		194	555	501			
4/14/2020			372	278			
4/15/2020	1060	262				155	
4/16/2020					280		166
8/24/2020							162
8/25/2020	1060				160	131	
8/26/2020		186	517	472			
3/16/2021	1040						
3/22/2021					126	204	157
3/23/2021		273	361	286			
10/5/2021	964			378			
10/6/2021						136	182
10/11/2021		190					
10/12/2021			352		142		

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			574				
2/6/2018			572				
4/23/2018			414				
6/27/2018			440				
8/7/2018			485				
10/22/2018			484				
12/4/2018			504				
2/5/2019			366				
2/26/2019			372				
8/20/2019			369				
4/14/2020		190		323			
4/15/2020	126		300				324
8/25/2020	107		339				321
8/26/2020		202		310			
3/16/2021	52						
3/22/2021							314
3/23/2021		174		385			
3/24/2021			287				
10/6/2021					864		317
10/11/2021		202	337	384		230	
10/12/2021	78.7						

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2022 1:49 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		628					
12/7/2017			189		215	136	137
2/6/2018		556	206		204		
2/8/2018						122	124
4/24/2018		510	193				
4/25/2018					192	102	106
6/26/2018			180			106	129
6/27/2018		486			180		
8/6/2018			182				
8/7/2018		487			183	71.3	
8/8/2018							142
10/22/2018		450	204				
10/23/2018					169	105	142
12/3/2018		492	168			102	
12/4/2018							121
12/5/2018					177		
2/5/2019		428	158		198	107	
2/6/2019							108
2/25/2019		441					
2/26/2019			191			99.3	
2/27/2019					185		103
6/18/2019		422					
8/20/2019		416	164		174	98.7	
8/21/2019							133
4/13/2020		433			192	90.7	
4/15/2020			170	218			102
8/24/2020					175		
8/26/2020		455	168	239		91.3	109
3/16/2021					184		
3/17/2021						80	
3/22/2021		427					
3/23/2021							92.7
3/24/2021			180	222			
3/30/2021	528						
10/5/2021		389	200		168	96.7	113
10/11/2021				220			
10/12/2021	536						

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 1/13/2022 1:49 PM

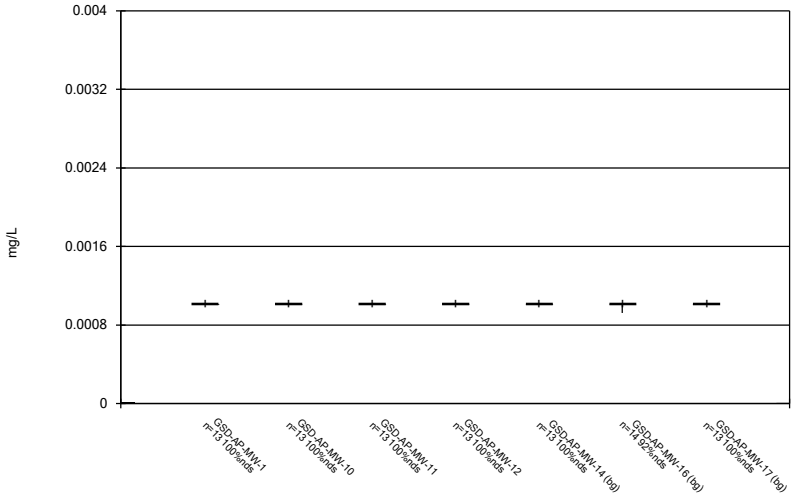
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	253	183				
2/8/2018	229					
2/12/2018		201				
4/25/2018	223	180				
6/26/2018	232	191				
6/27/2018			144		48.7	44
7/18/2018			156		46	42.7
8/7/2018			140			
8/8/2018	208	192			48	46
9/5/2018			154		47.3	67.3
9/24/2018			165		44.7	49.3
10/22/2018			148			
10/23/2018	209	185			35.3	31.3
12/3/2018			127		48.7	46
12/4/2018	213					
12/5/2018		200				
2/5/2019			113			
2/6/2019	212	151				
2/7/2019					42.7	32.7
2/25/2019			106		40.7	31.3
2/27/2019	211	186				
8/20/2019			141			
8/21/2019	226	200			46	42.7
4/13/2020			104	88		
4/14/2020	222	187				
4/15/2020					41.3	37.3
8/24/2020			114	115	42.7	37.3
8/26/2020	215	192				
3/16/2021					42	41.3
3/17/2021				53.3		
3/23/2021	200	178				
3/24/2021			94			
10/5/2021			108	101		
10/12/2021	245	169			38.7	35.3

FIGURE B.

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

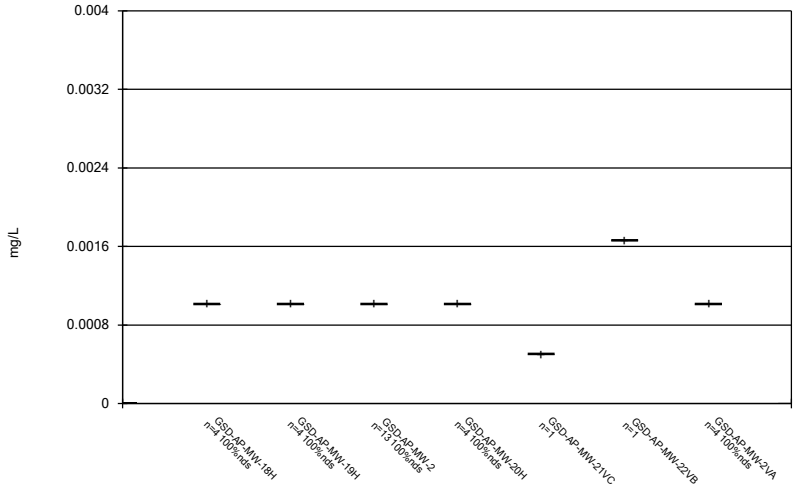


Constituent: Antimony Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

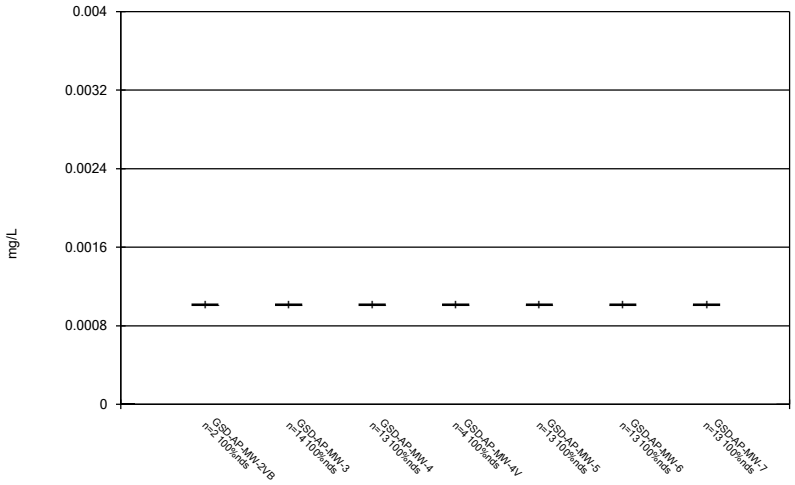


Constituent: Antimony Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

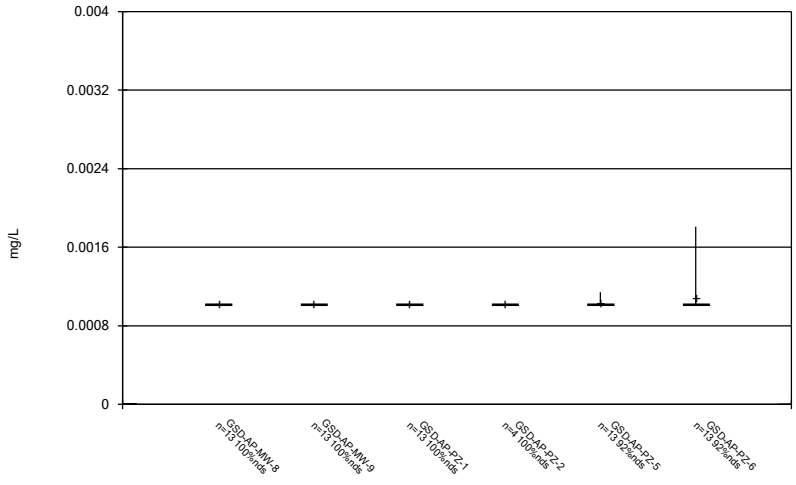


Constituent: Antimony Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

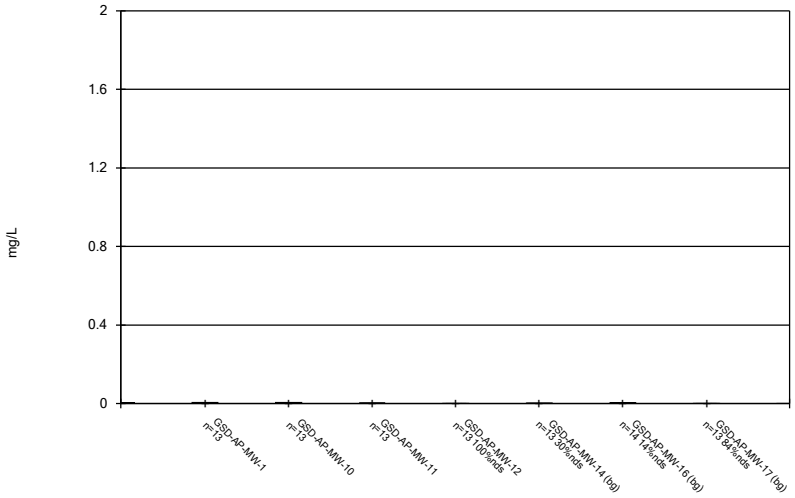


Constituent: Antimony Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

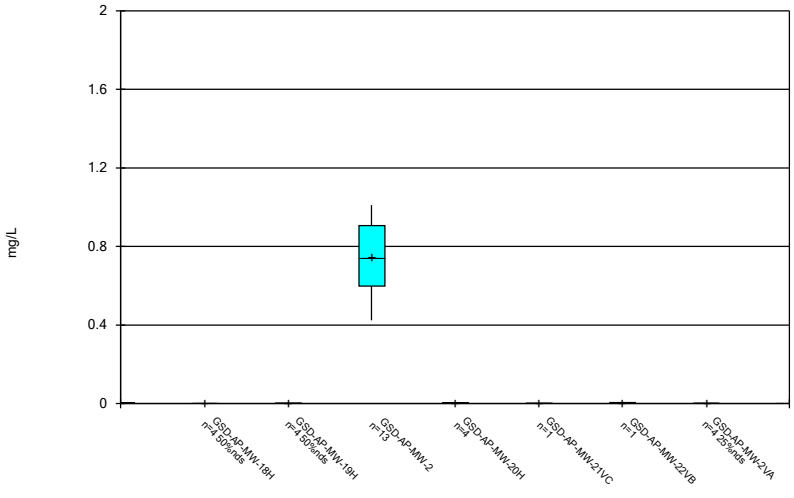


Constituent: Arsenic Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

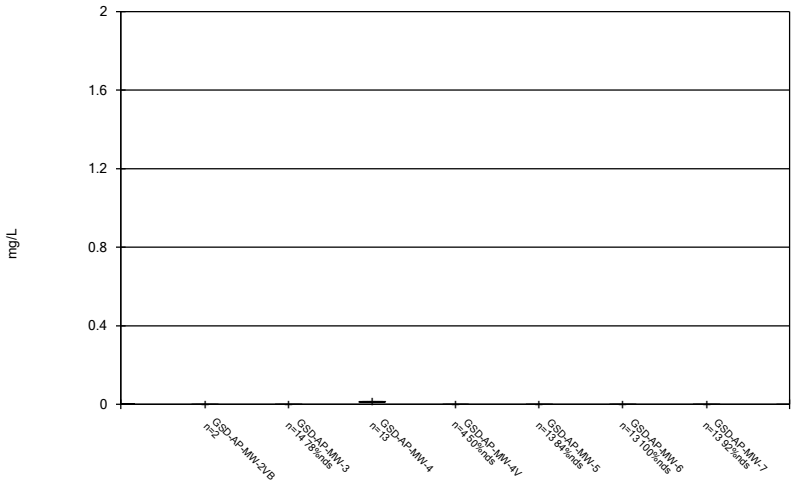


Constituent: Arsenic Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

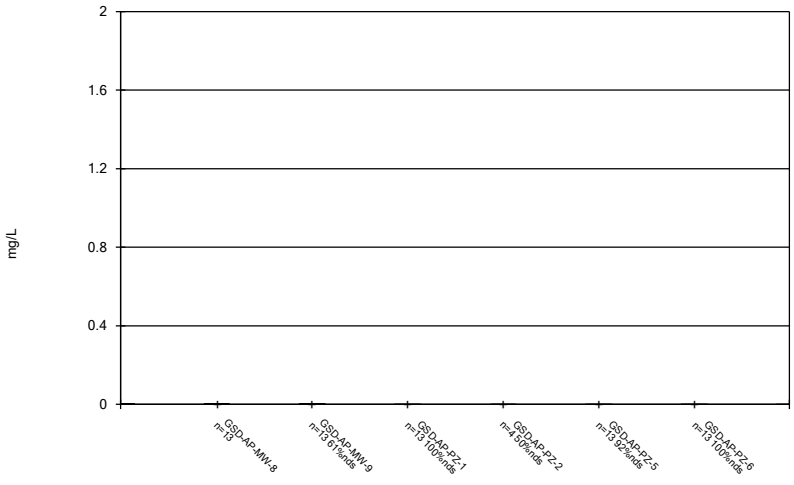


Constituent: Arsenic Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

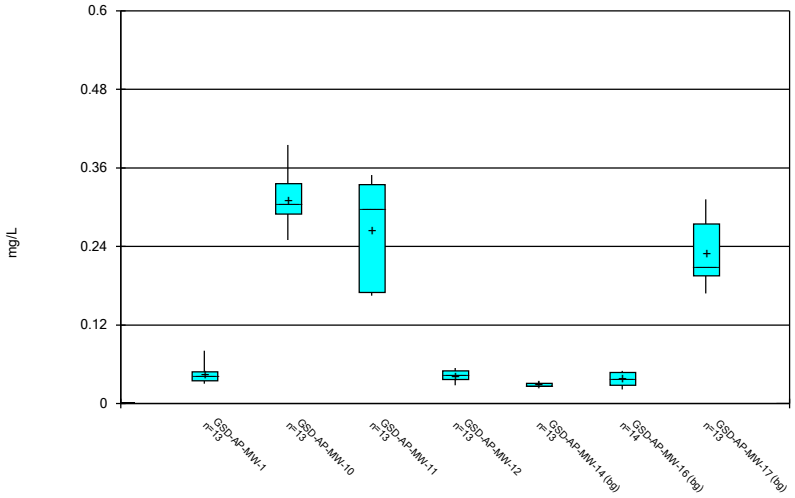


Constituent: Arsenic Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

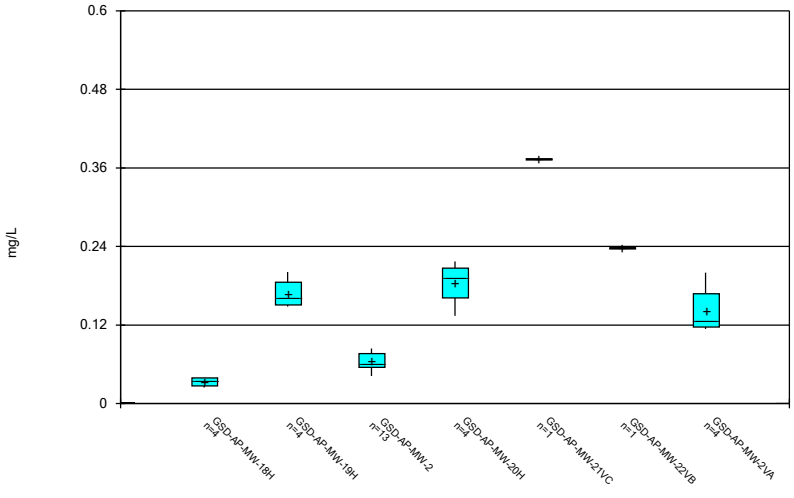


Constituent: Barium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

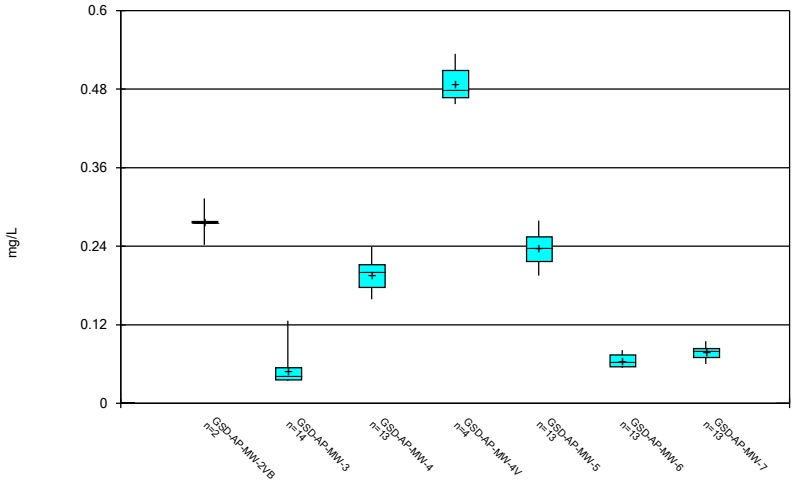


Constituent: Barium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

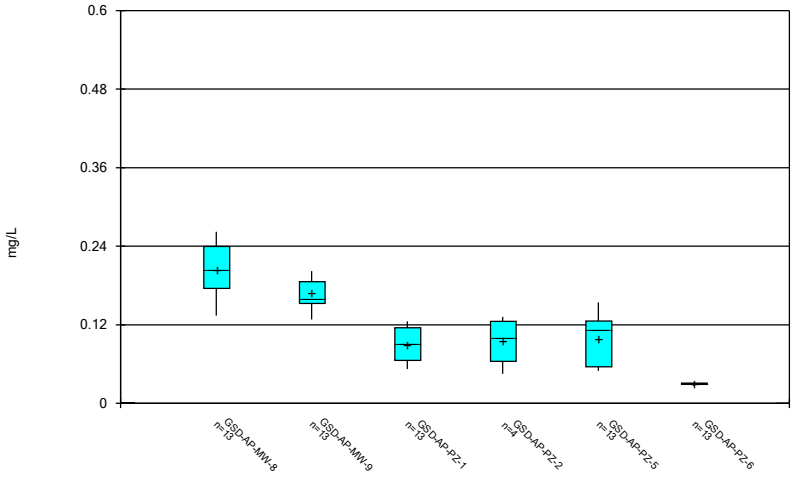


Constituent: Barium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

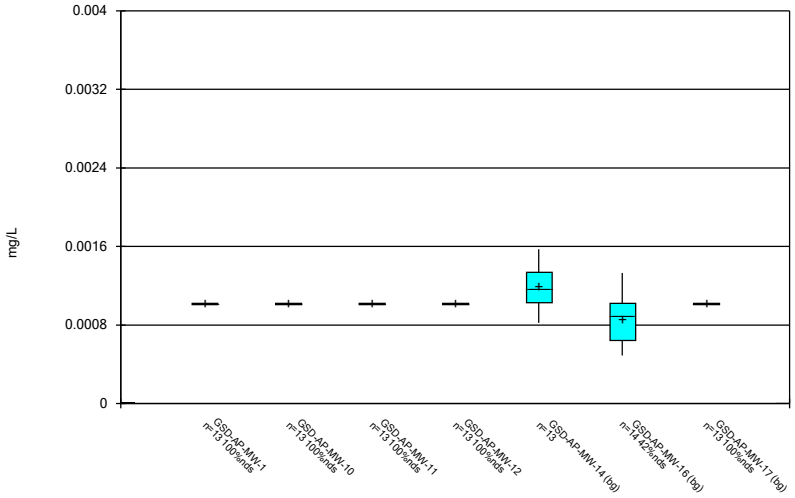


Constituent: Barium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

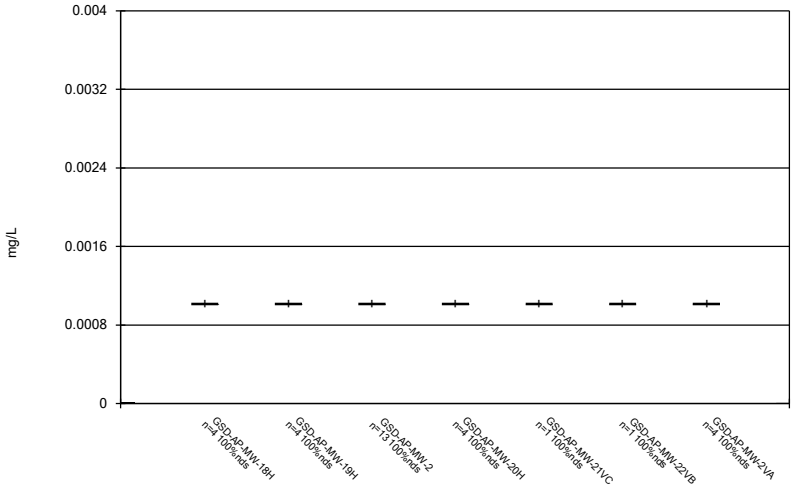


Constituent: Beryllium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

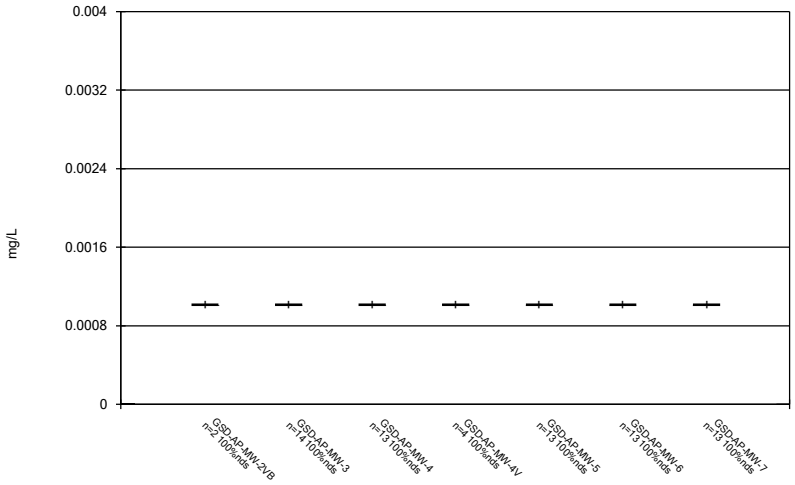


Constituent: Beryllium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

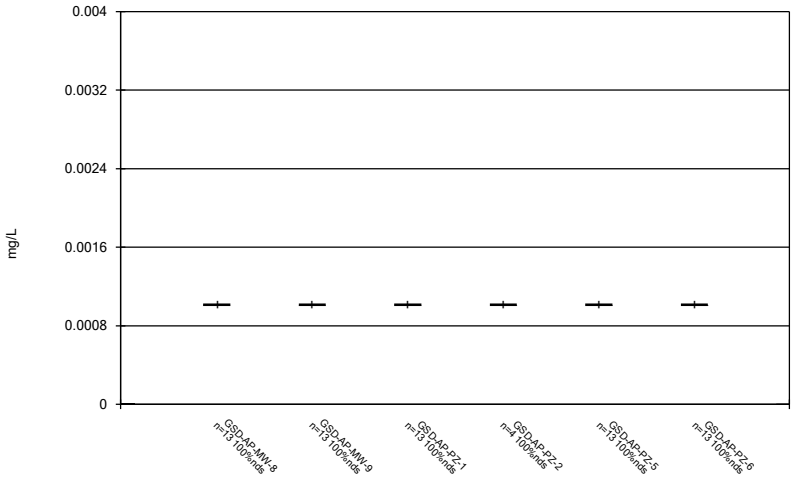


Constituent: Beryllium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

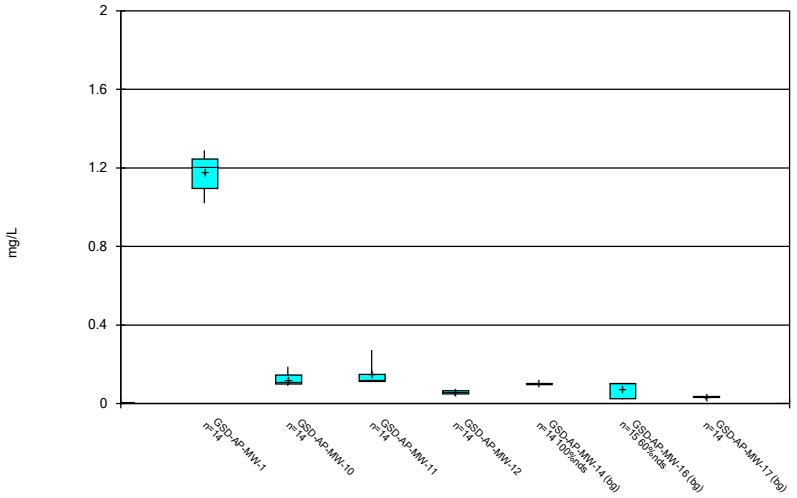


Constituent: Beryllium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

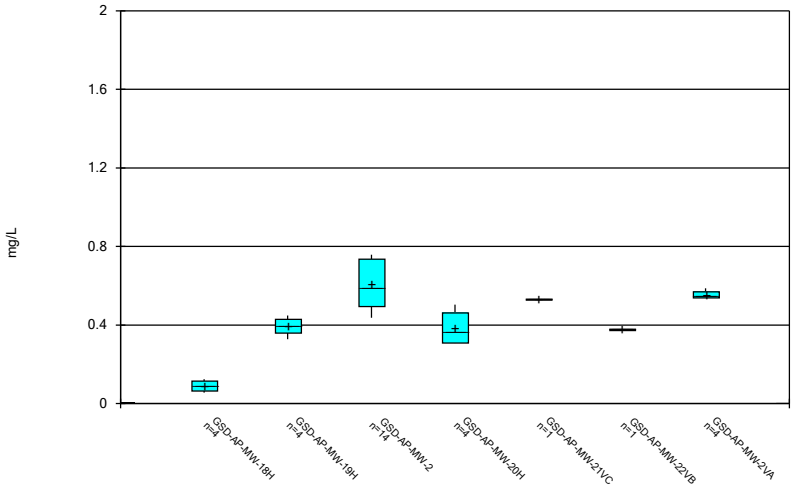


Constituent: Boron Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

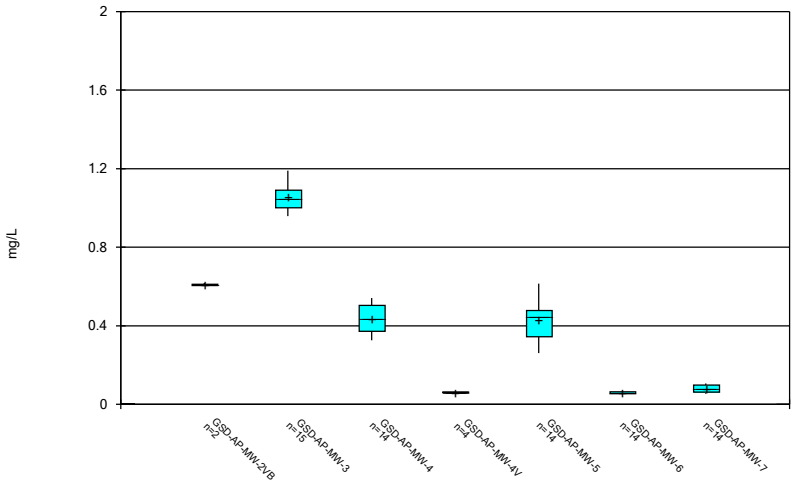


Constituent: Boron Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

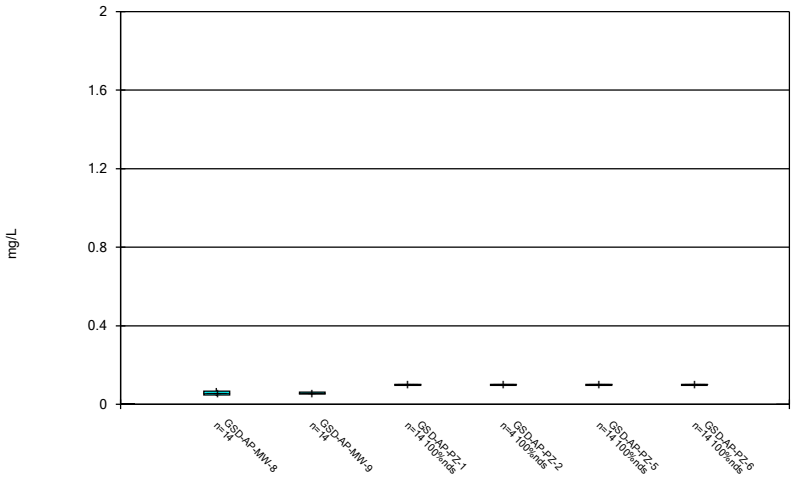


Constituent: Boron Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

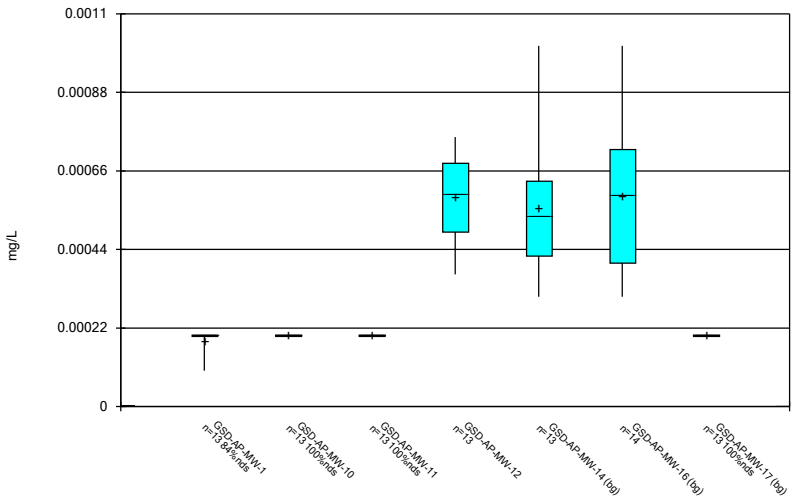


Constituent: Boron Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

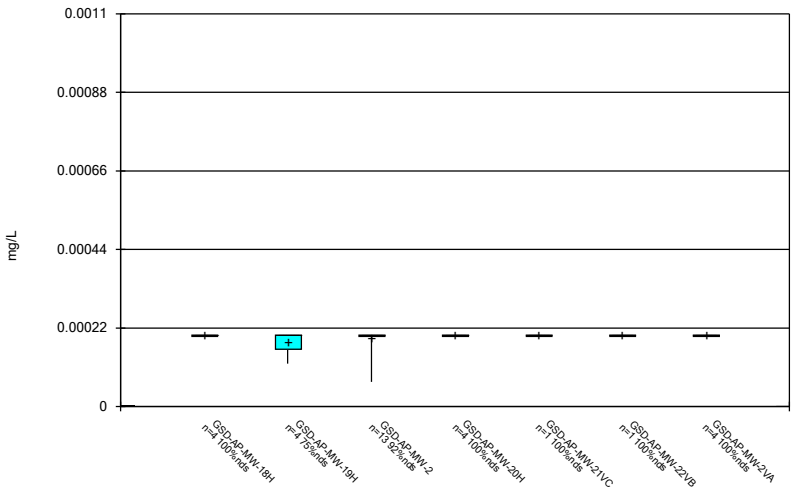


Constituent: Cadmium Analysis Run 1/13/2022 1:52 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

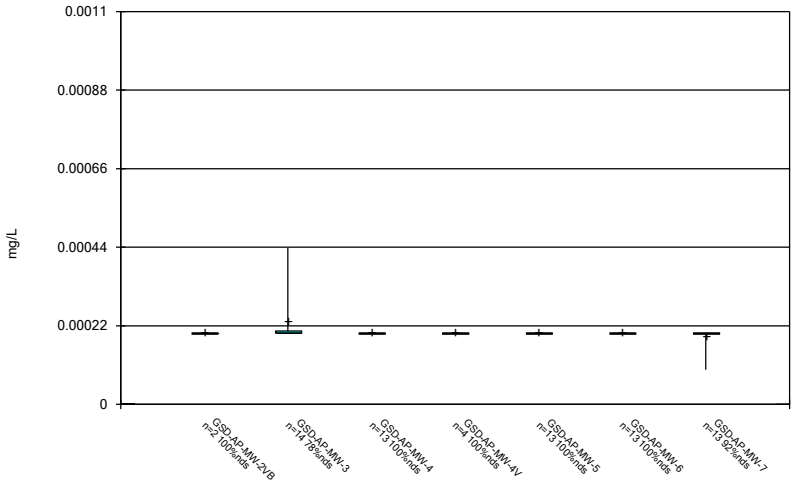


Constituent: Cadmium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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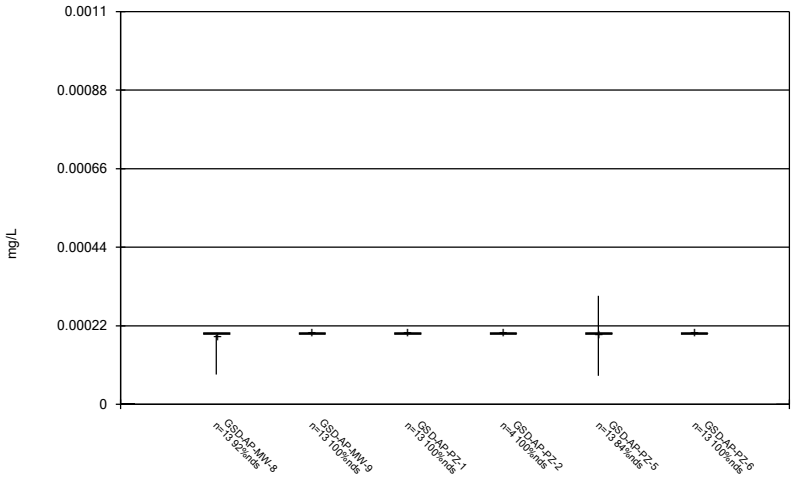
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

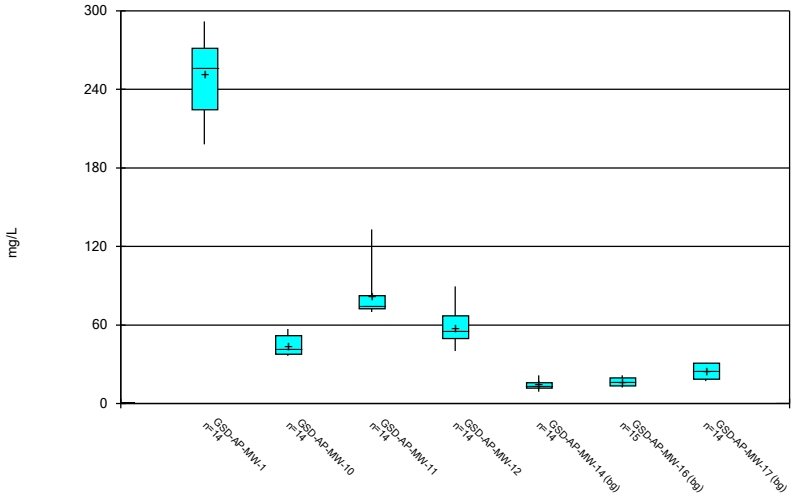


Constituent: Cadmium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

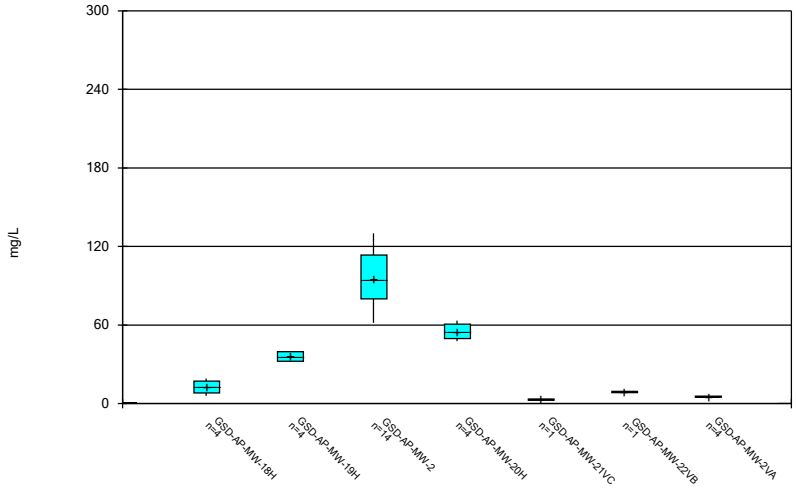


Constituent: Calcium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

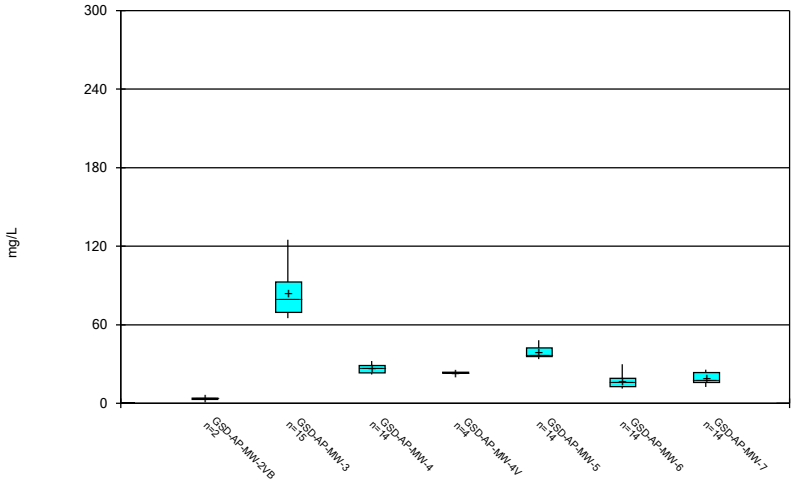


Constituent: Calcium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

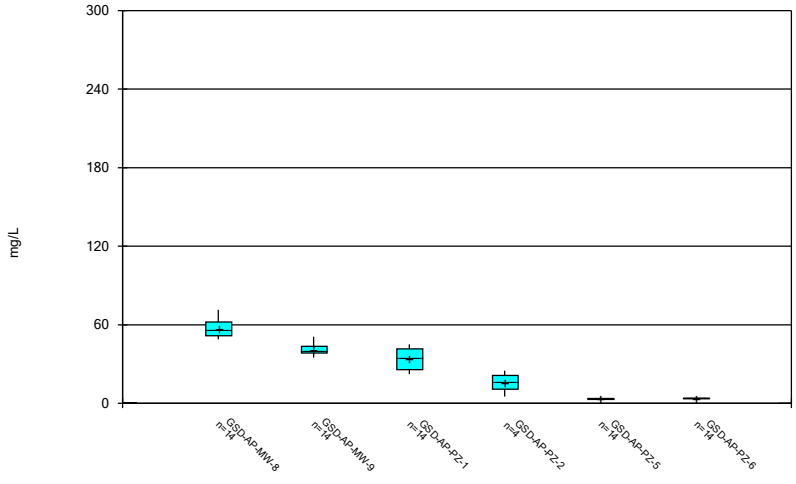


Constituent: Calcium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

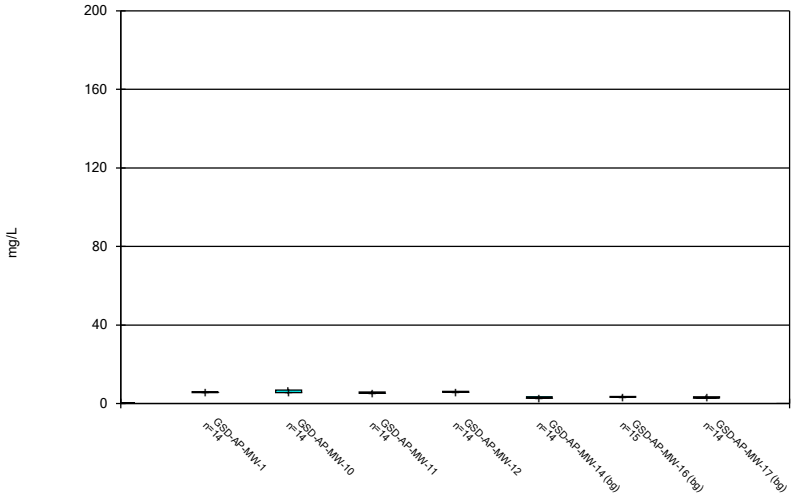
Box & Whiskers Plot



Constituent: Calcium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

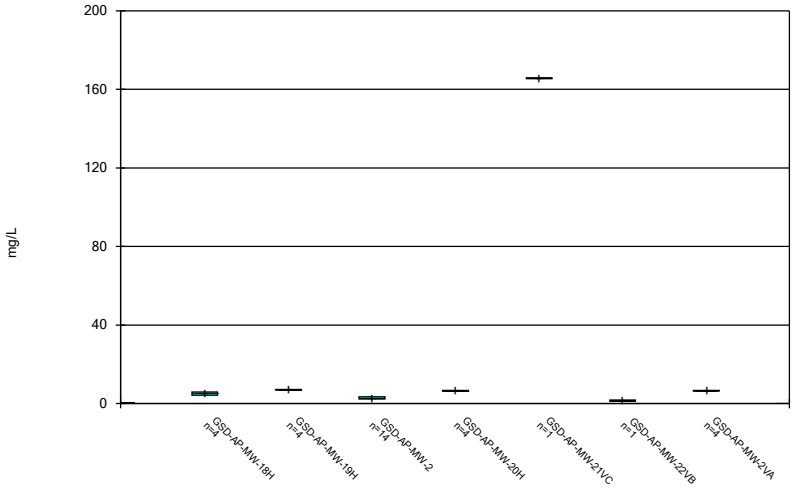


Constituent: Chloride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

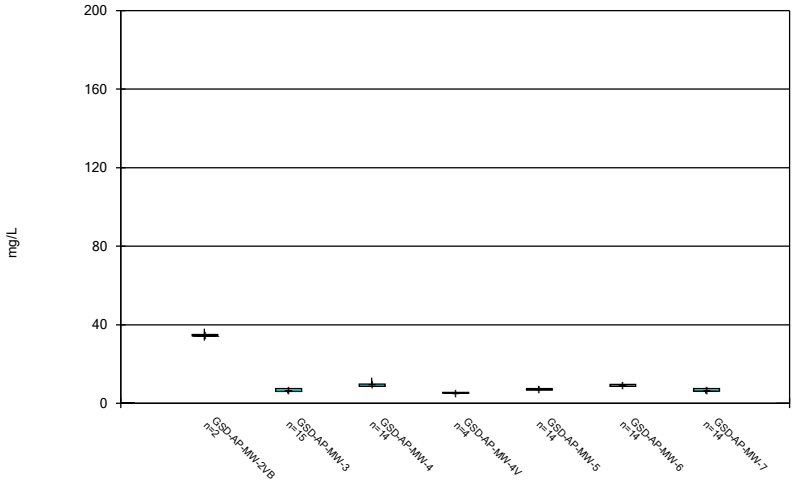


Constituent: Chloride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

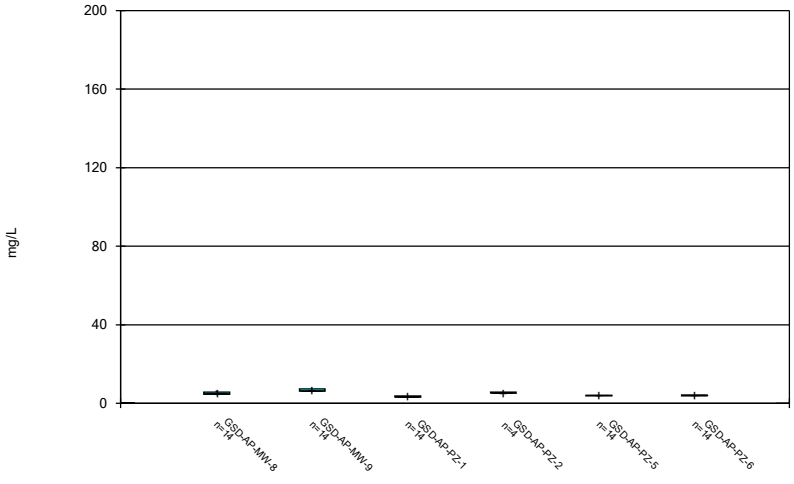


Constituent: Chloride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

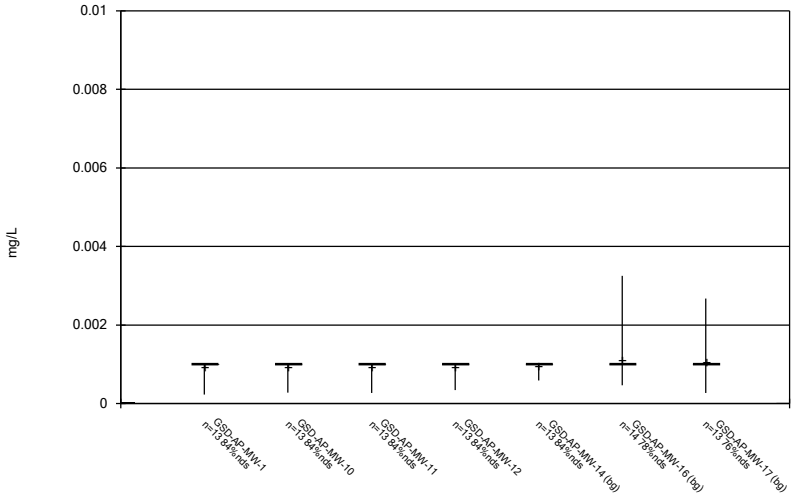


Constituent: Chloride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

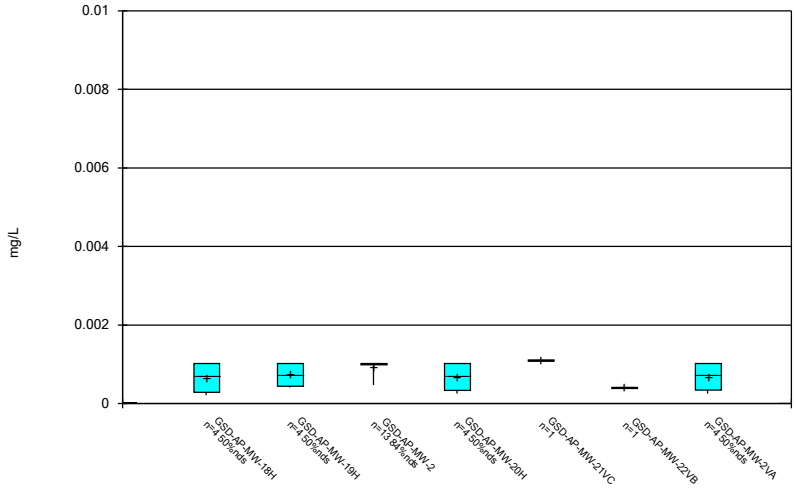


Constituent: Chromium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

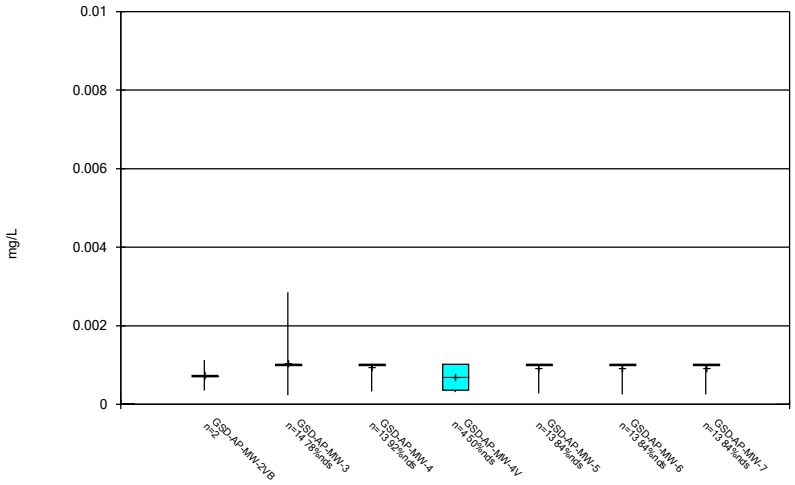


Constituent: Chromium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

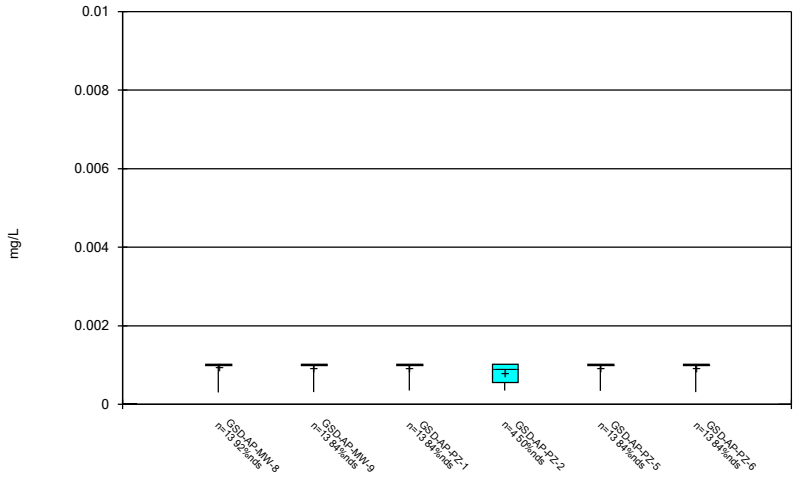


Constituent: Chromium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

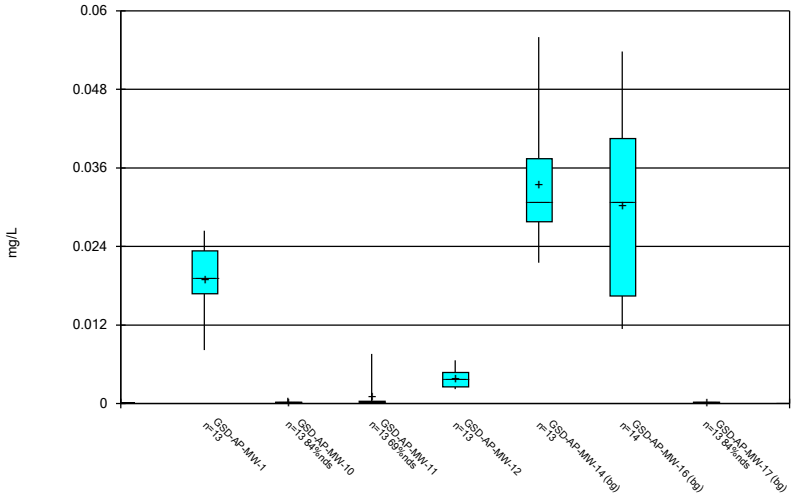


Constituent: Chromium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

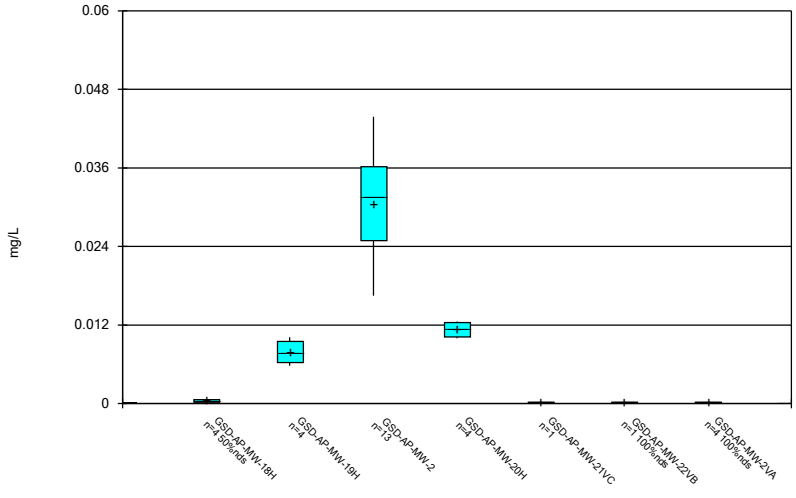


Constituent: Cobalt Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

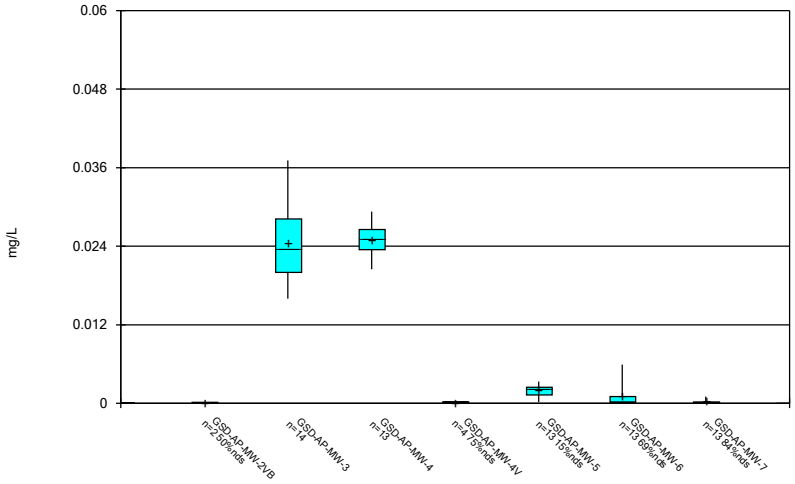


Constituent: Cobalt Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

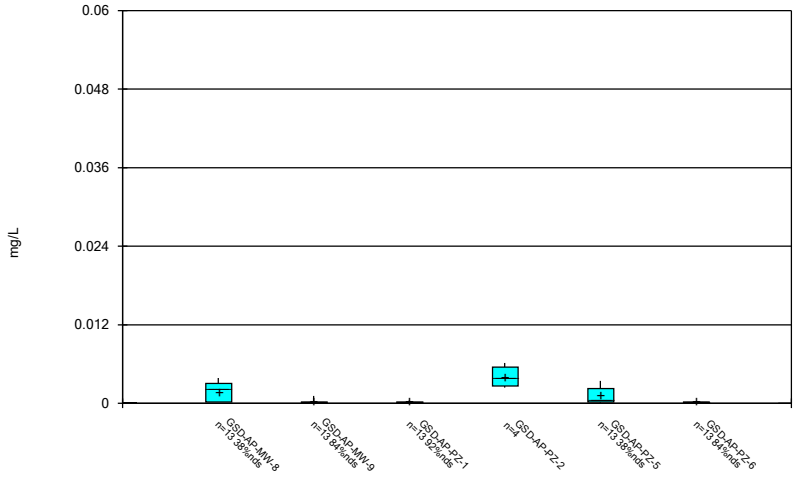


Constituent: Cobalt Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

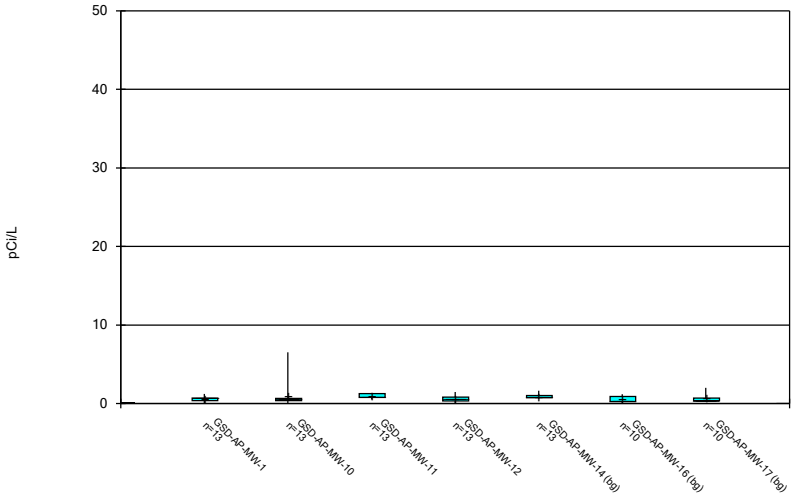


Constituent: Cobalt Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

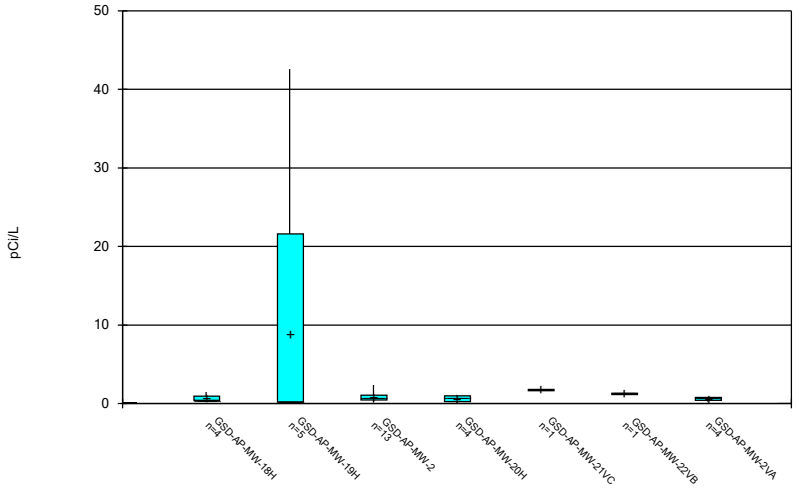
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

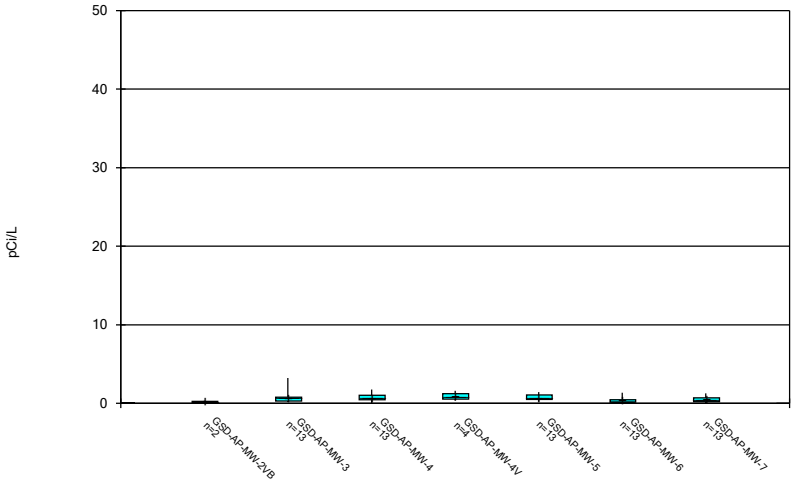
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

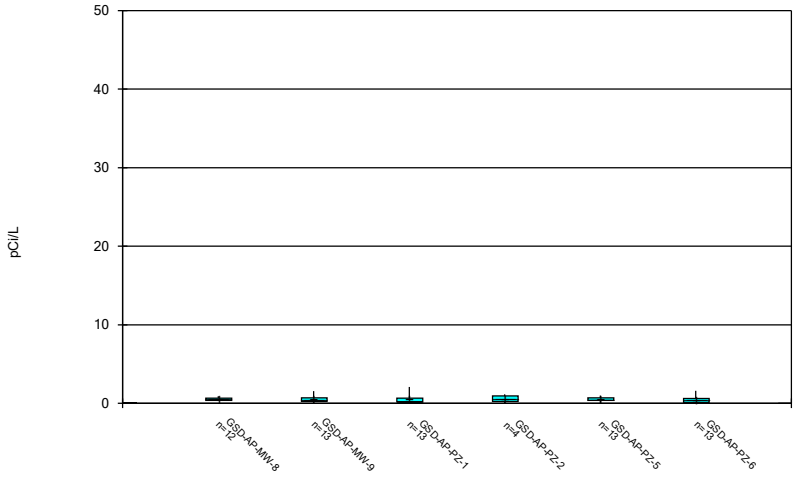
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

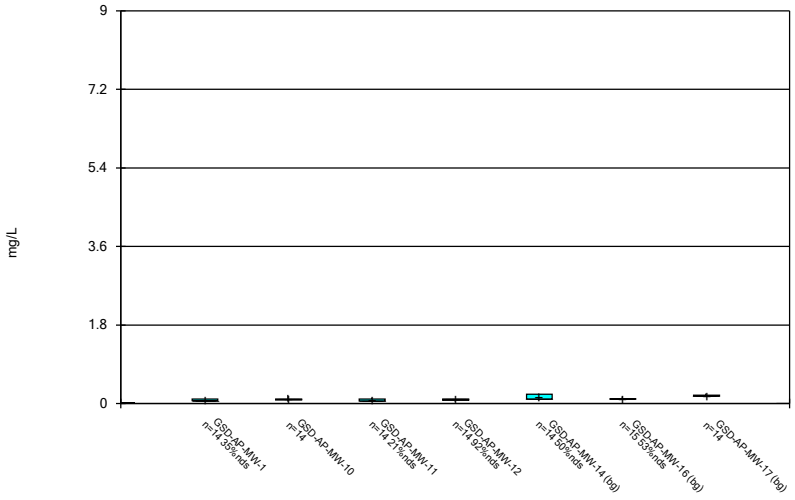
Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot

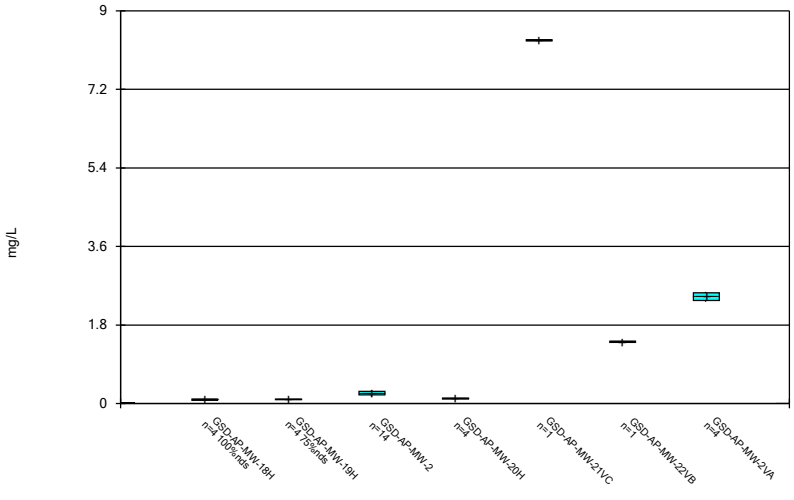


Constituent: Fluoride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

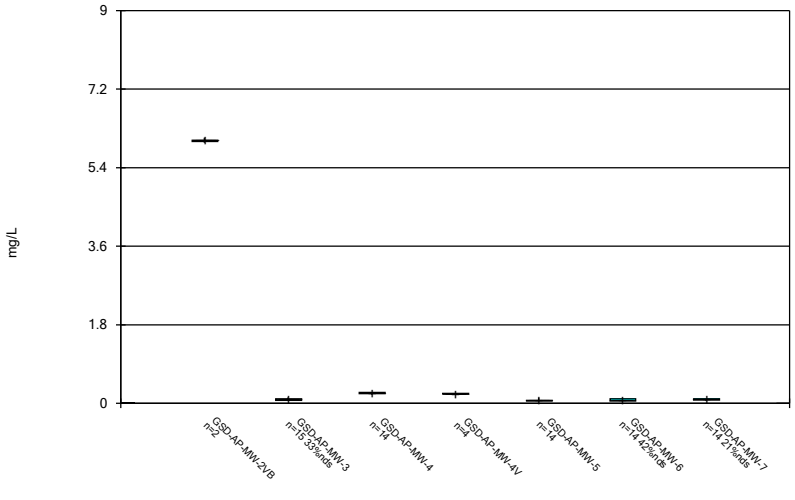


Constituent: Fluoride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

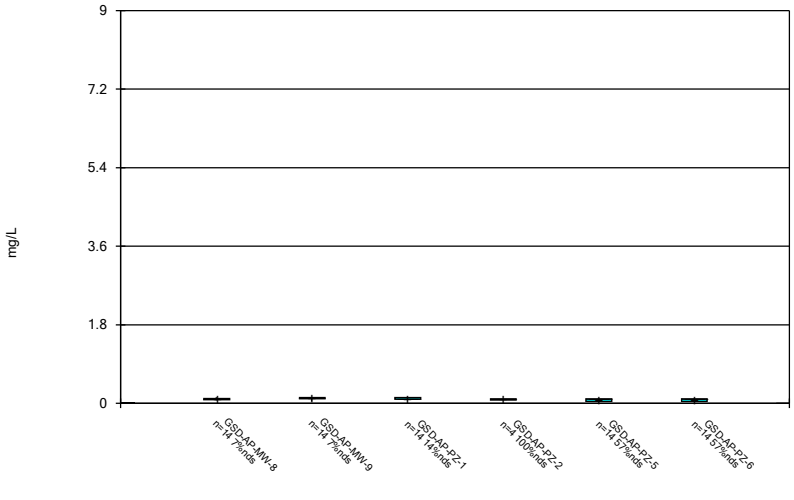


Constituent: Fluoride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

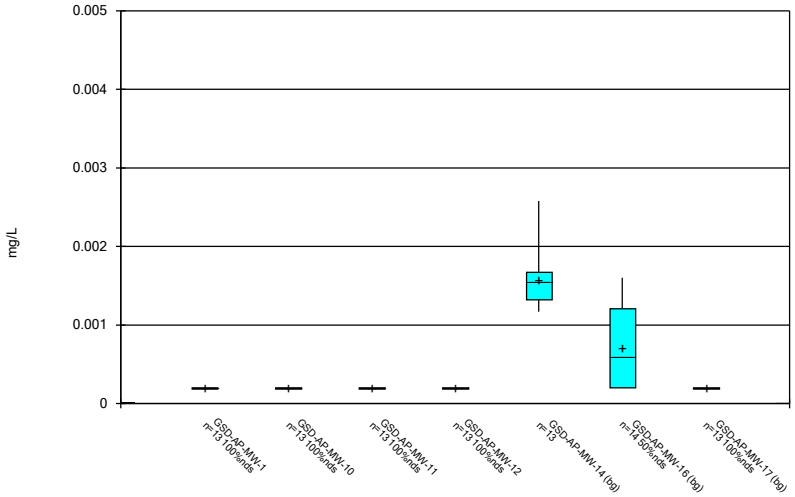


Constituent: Fluoride Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

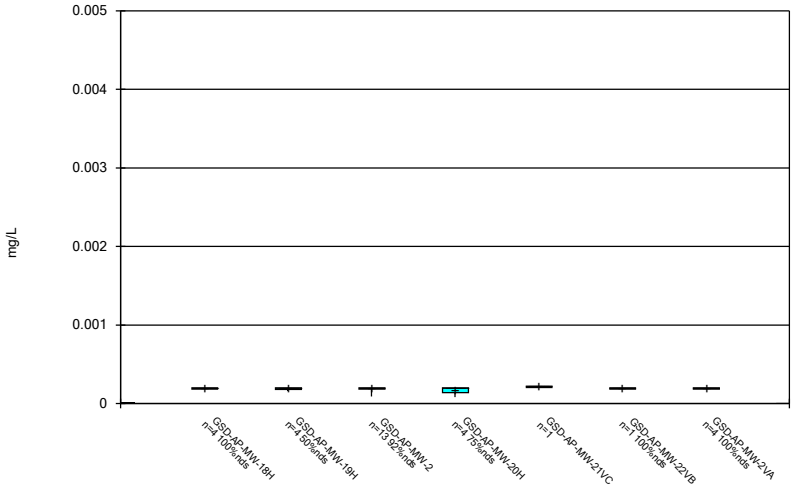


Constituent: Lead Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

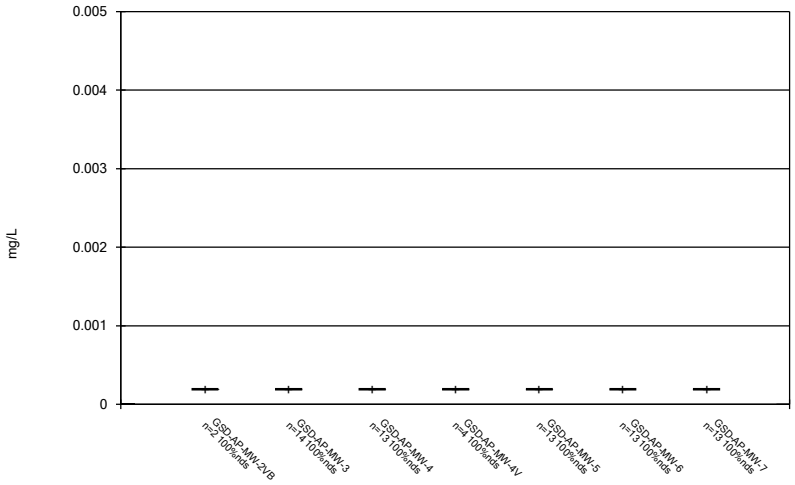


Constituent: Lead Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

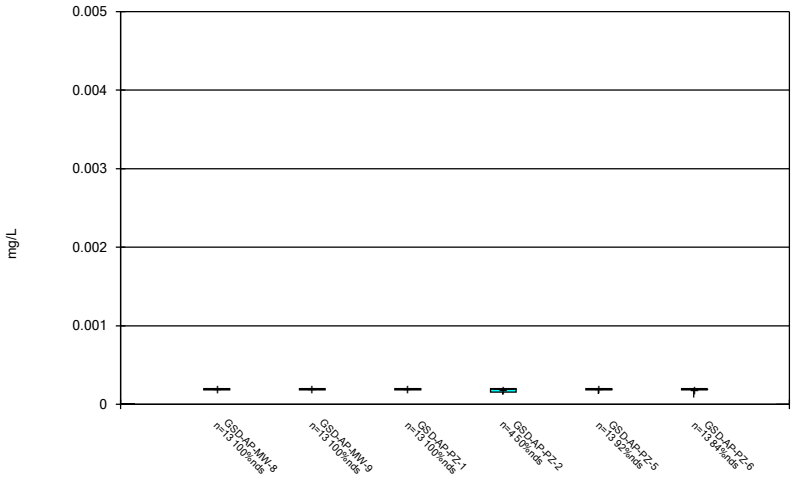


Constituent: Lead Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

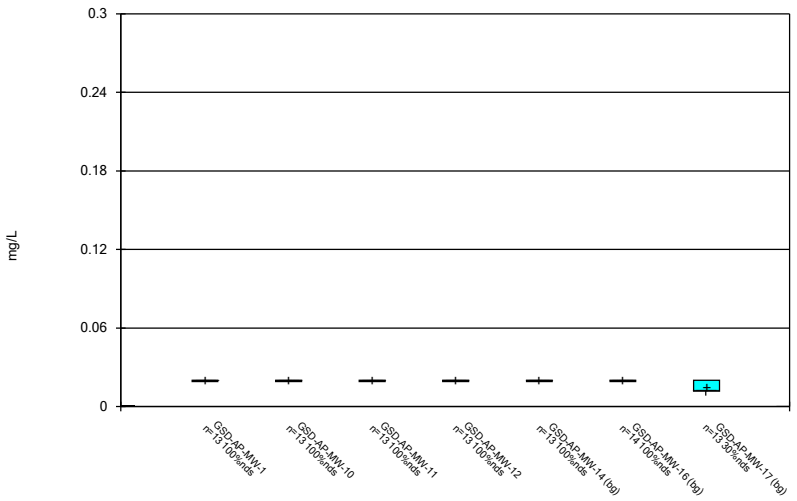


Constituent: Lead Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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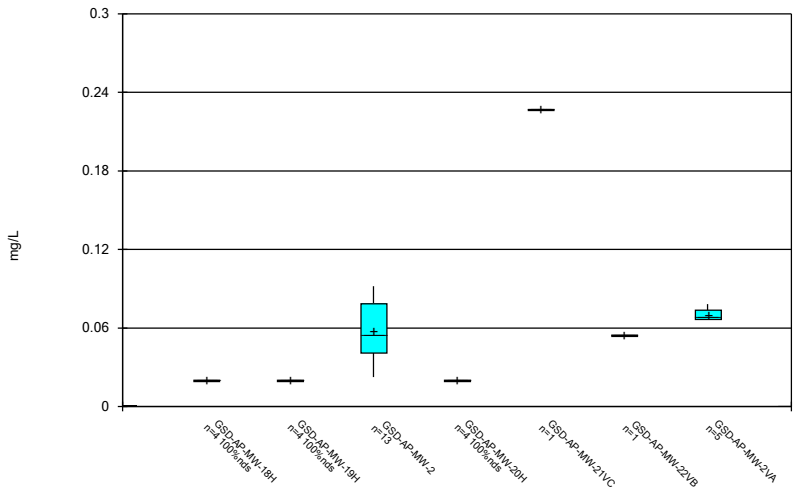
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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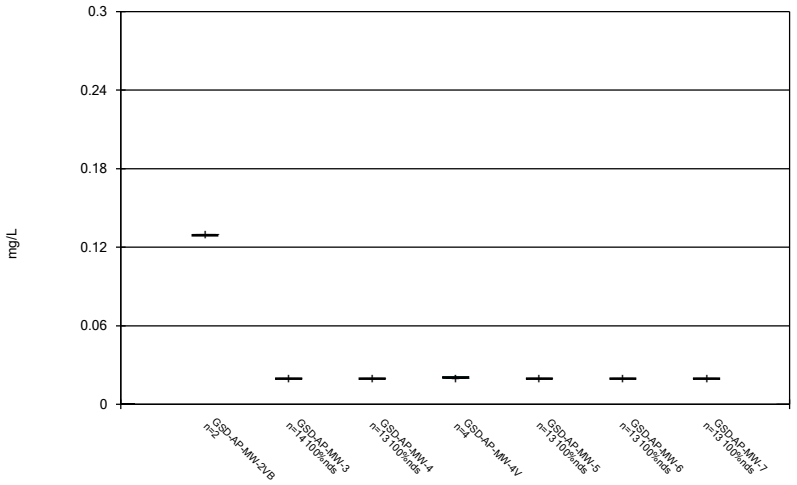
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

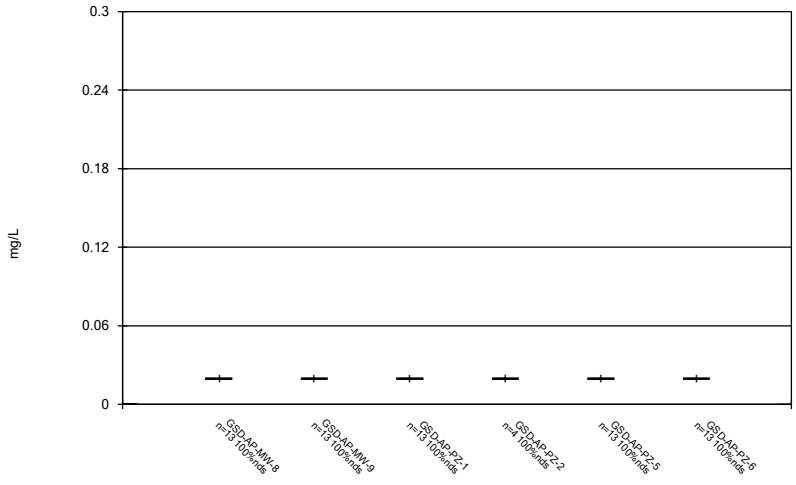


Constituent: Lithium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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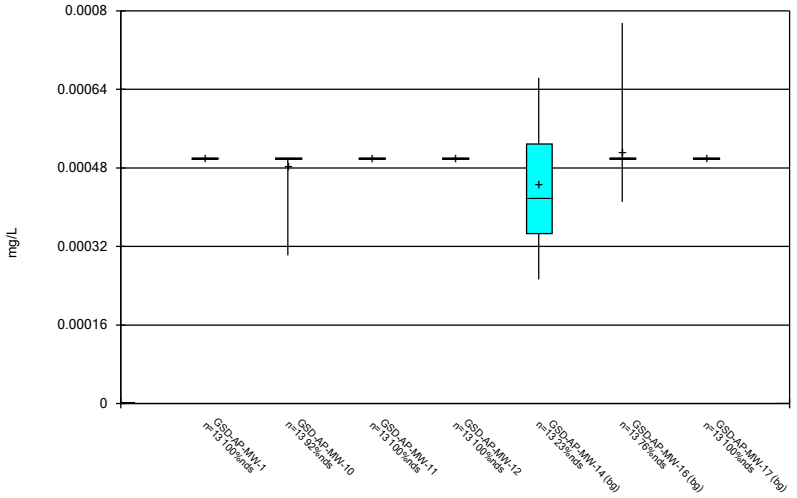
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Box & Whiskers Plot



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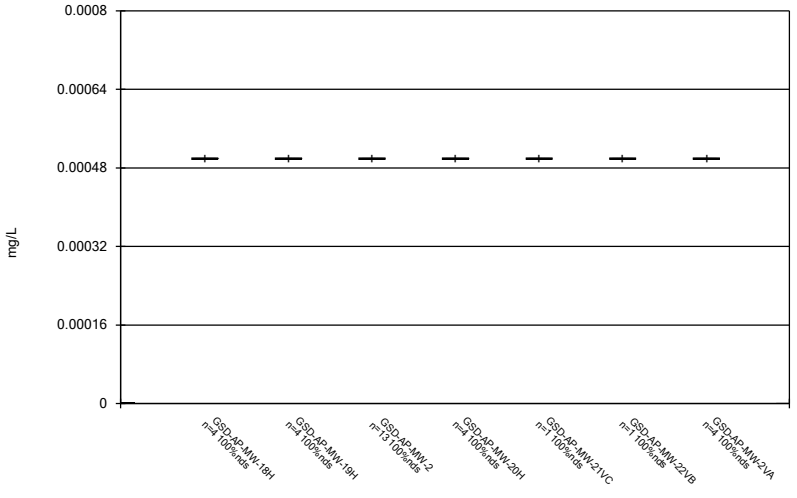
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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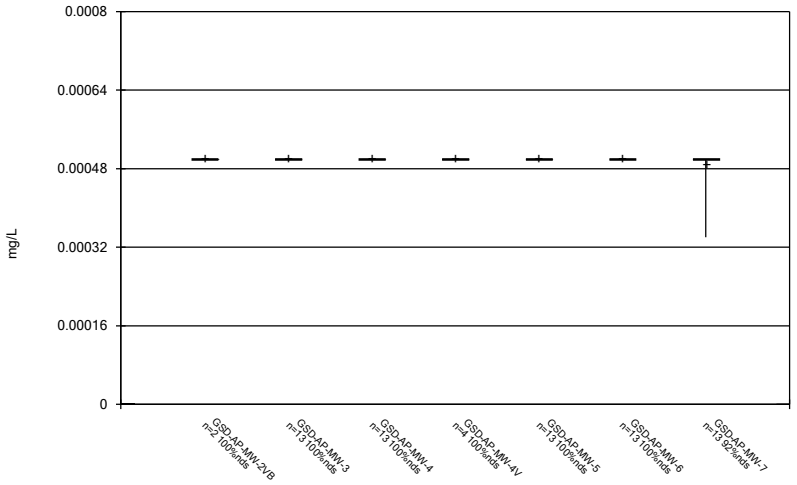
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

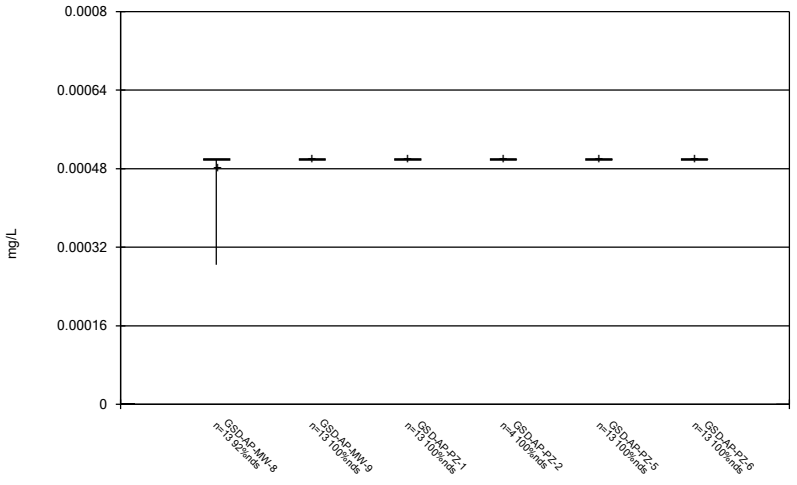


Constituent: Mercury Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

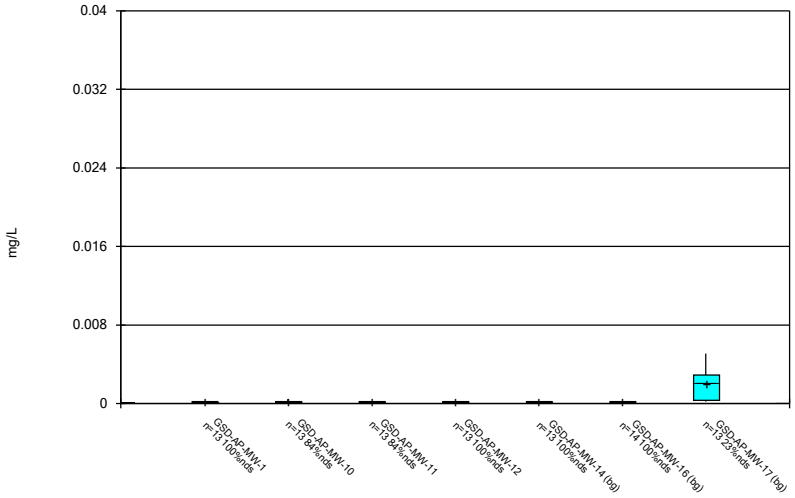


Constituent: Mercury Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

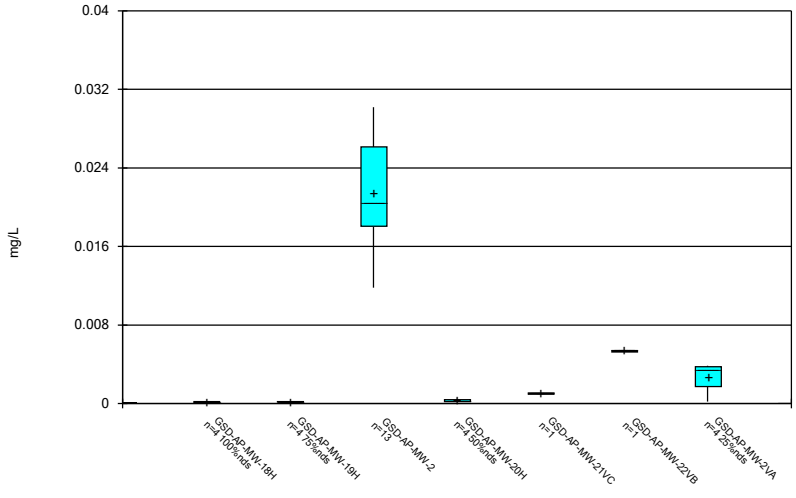


Constituent: Molybdenum Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

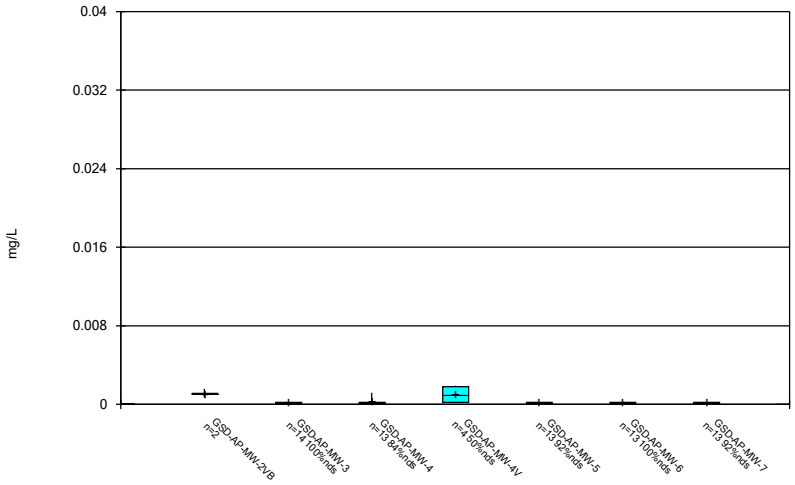


Constituent: Molybdenum Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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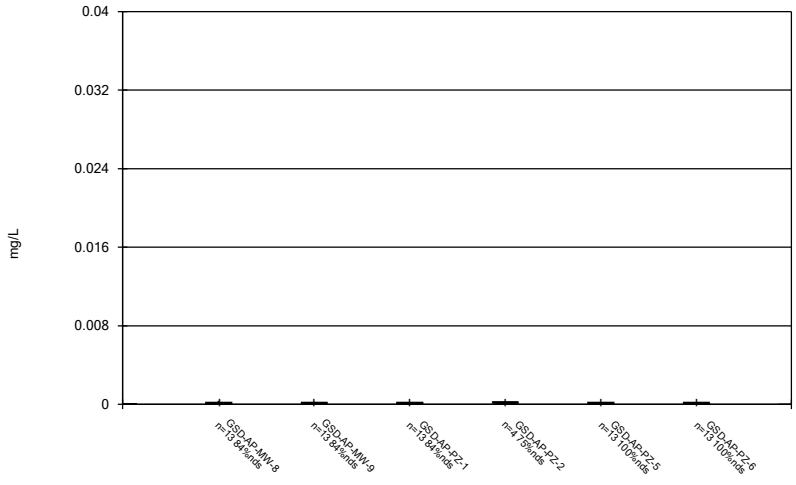
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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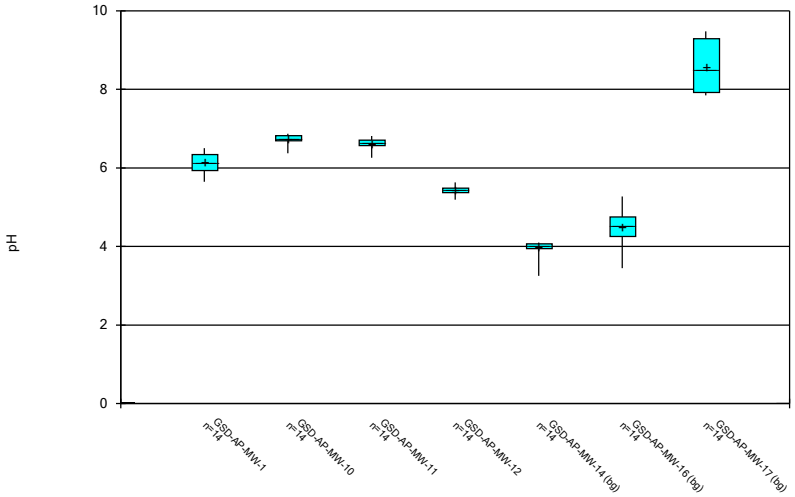
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

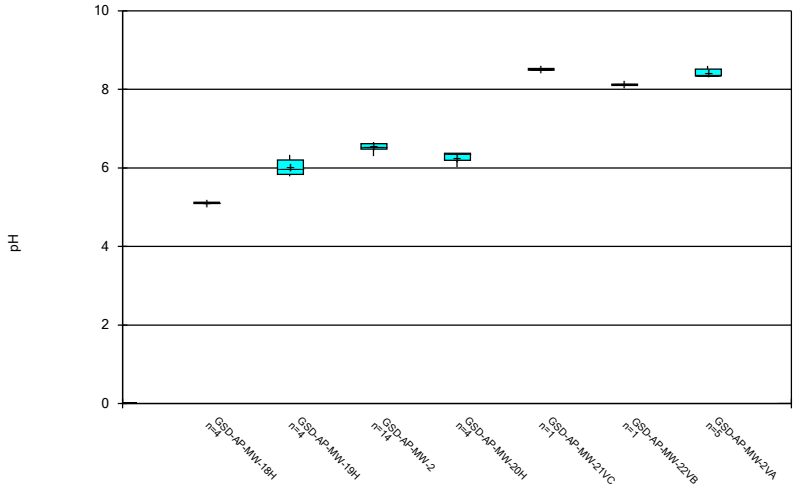


Constituent: pH Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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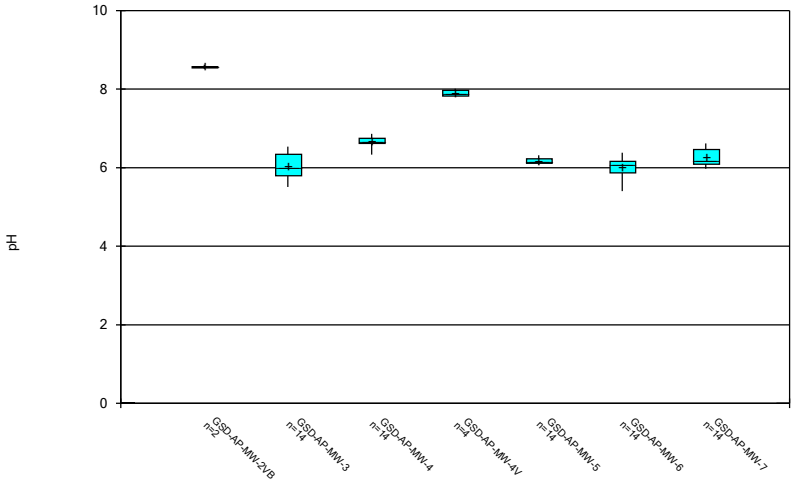
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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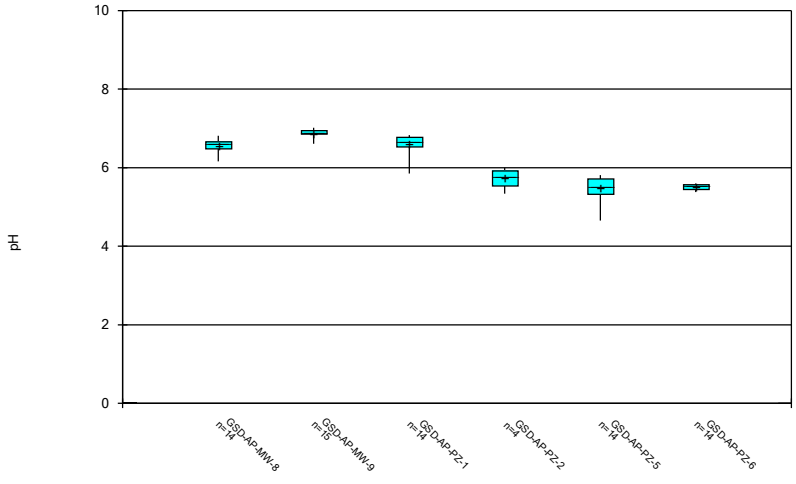
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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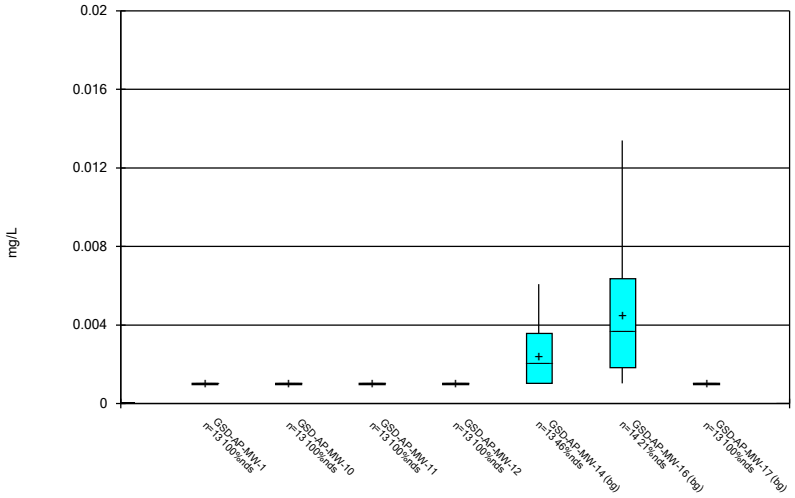
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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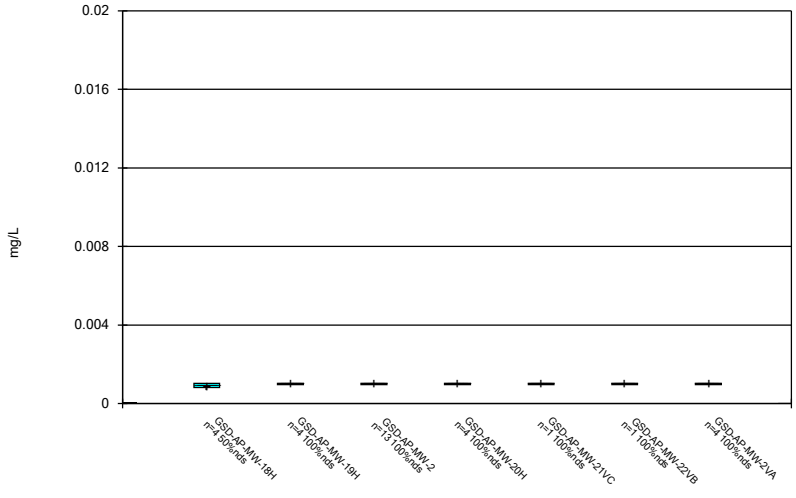
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

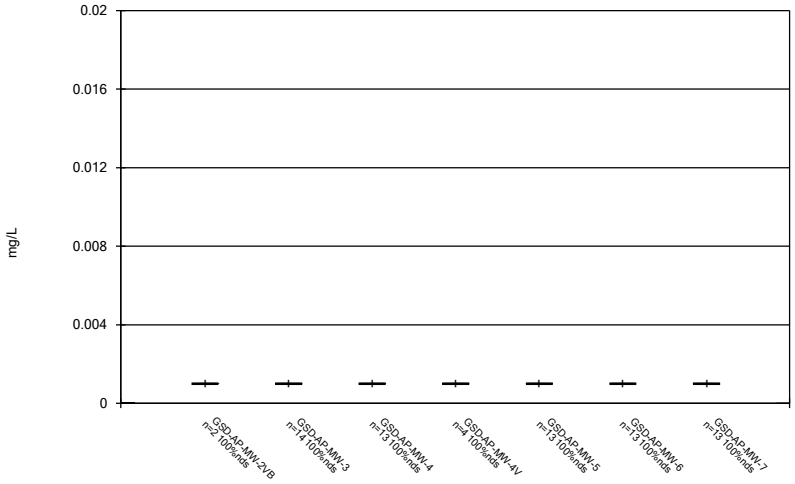


Constituent: Selenium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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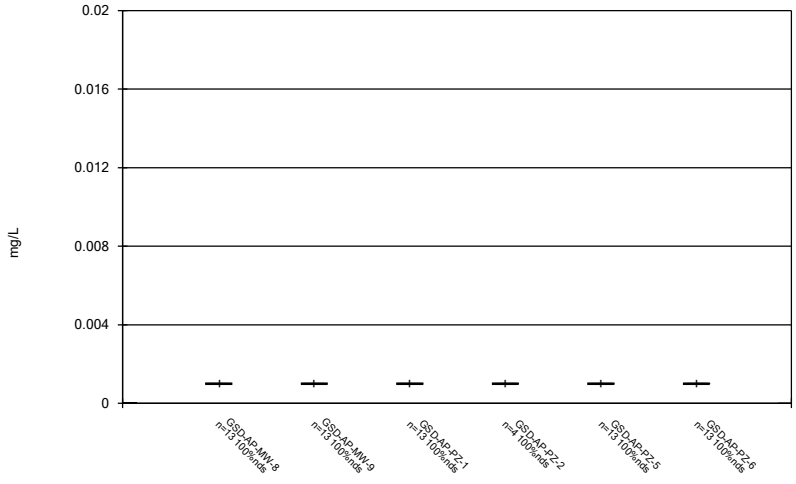
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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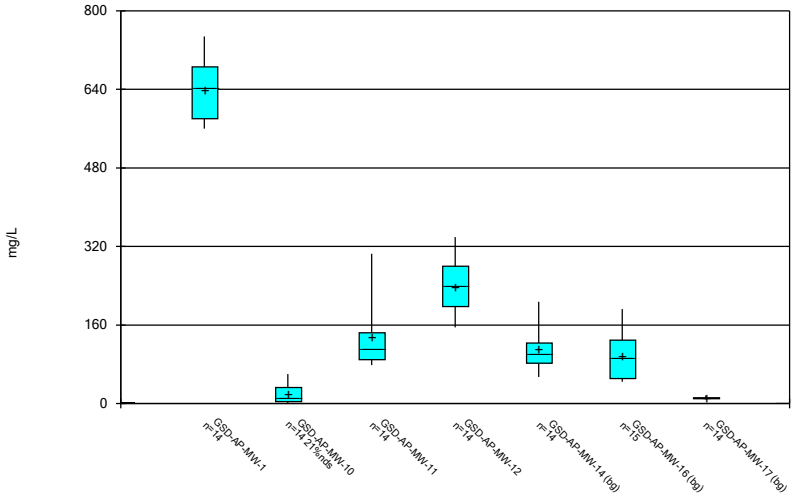
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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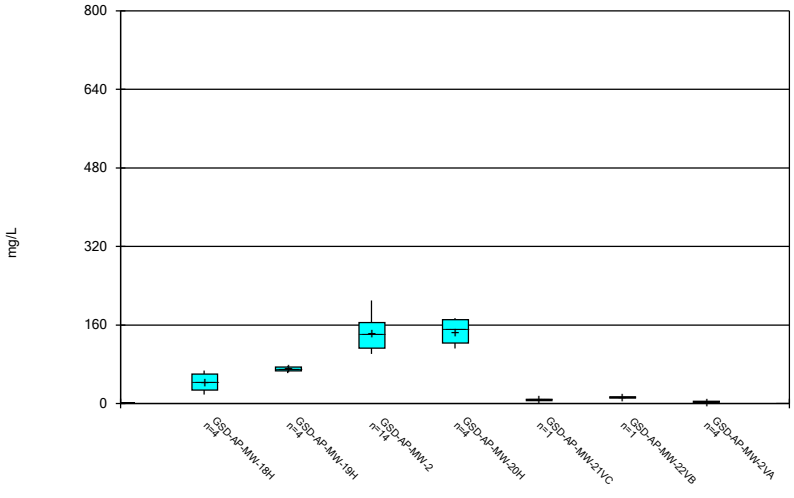
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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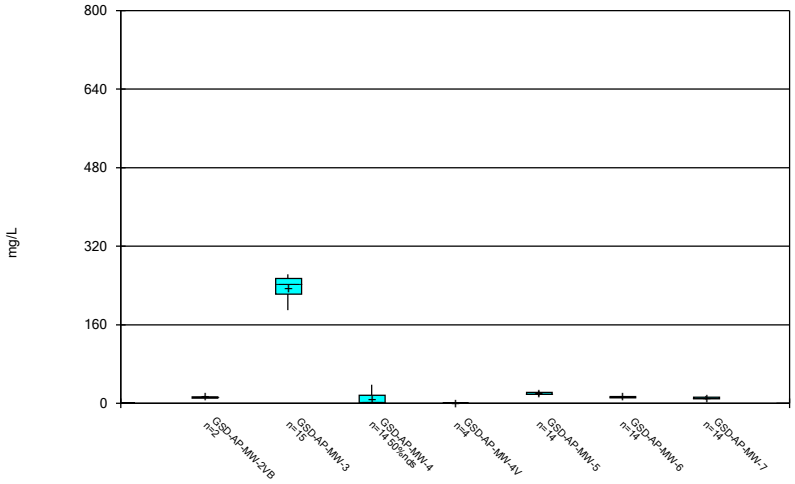
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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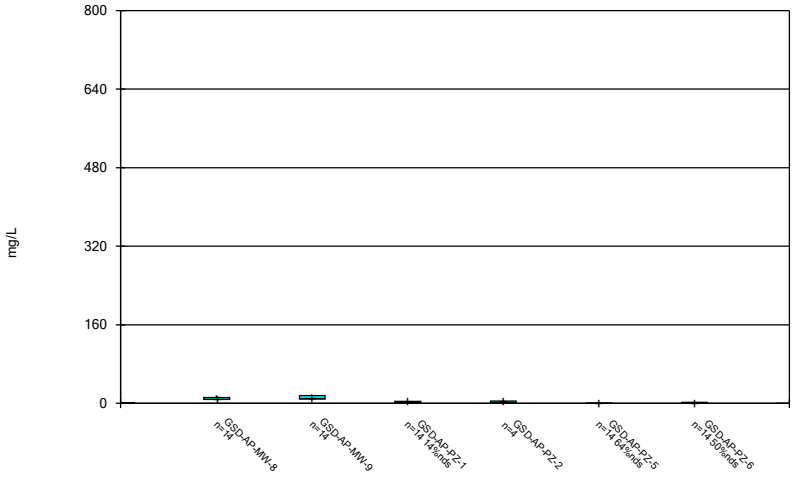
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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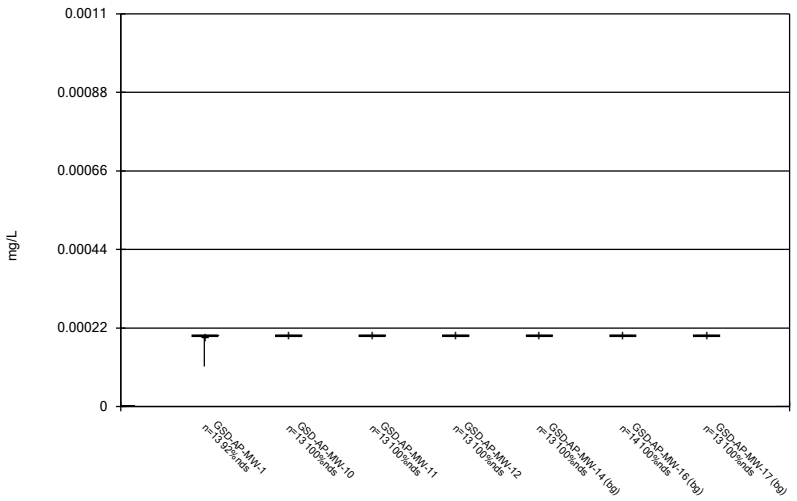
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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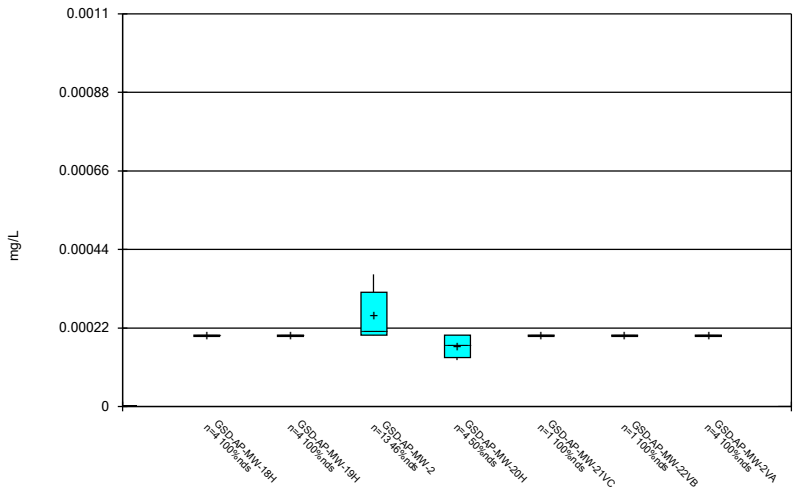
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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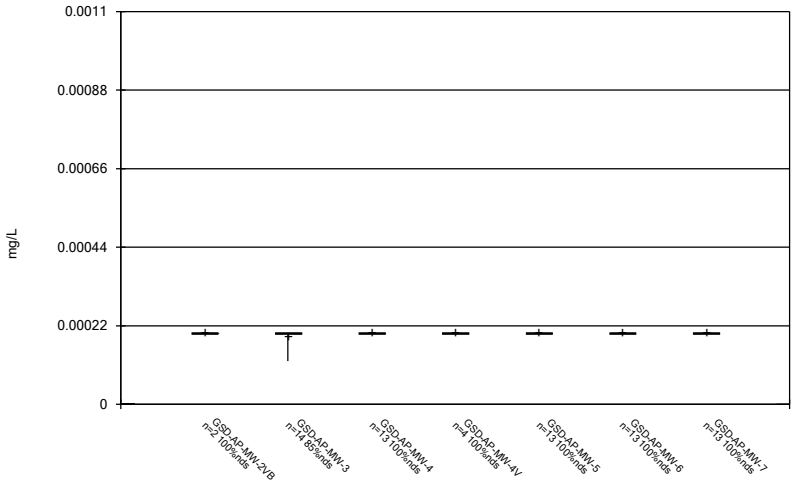
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



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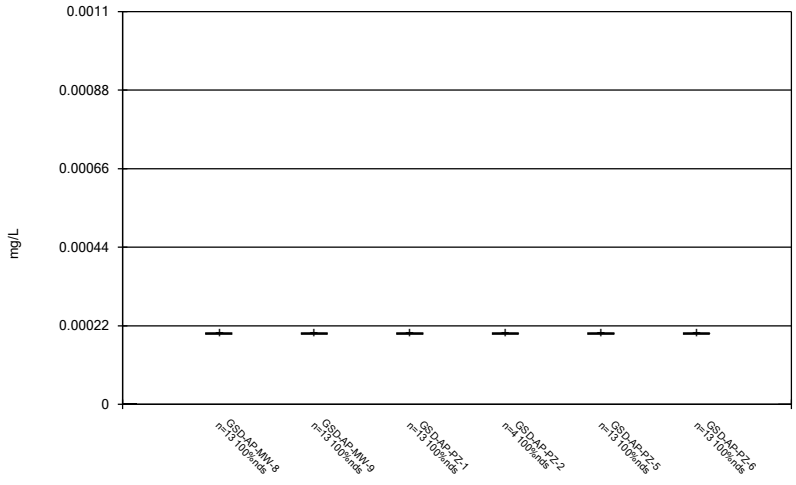
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot

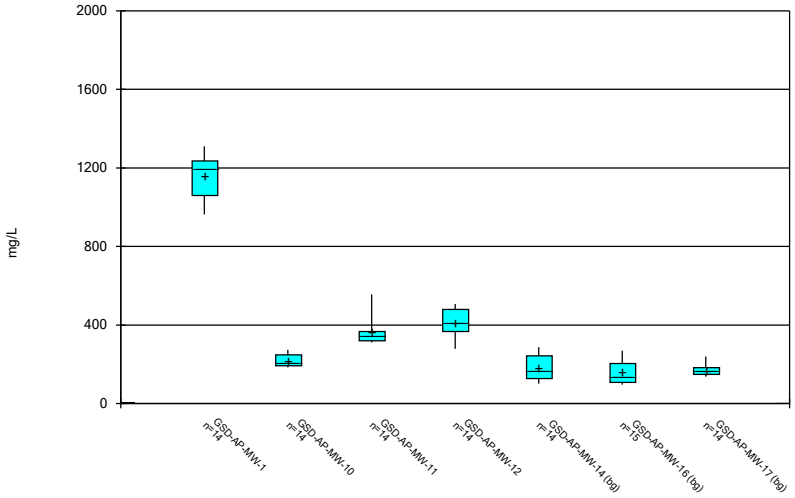


Constituent: Thallium Analysis Run 1/13/2022 1:53 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

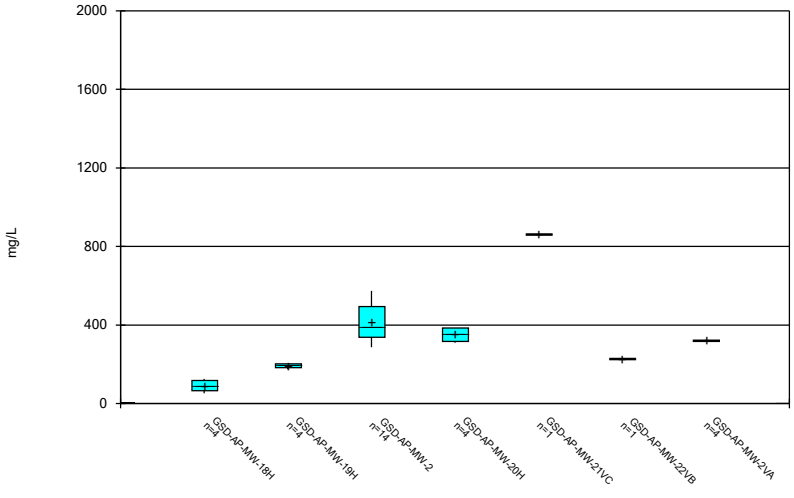
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

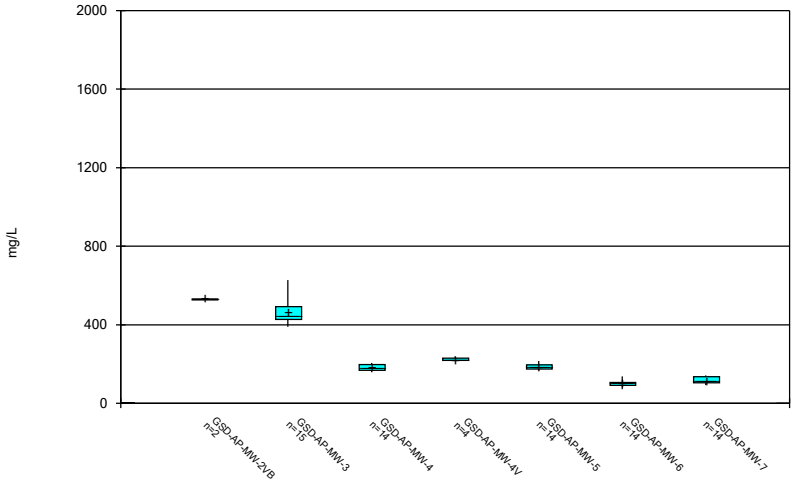
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

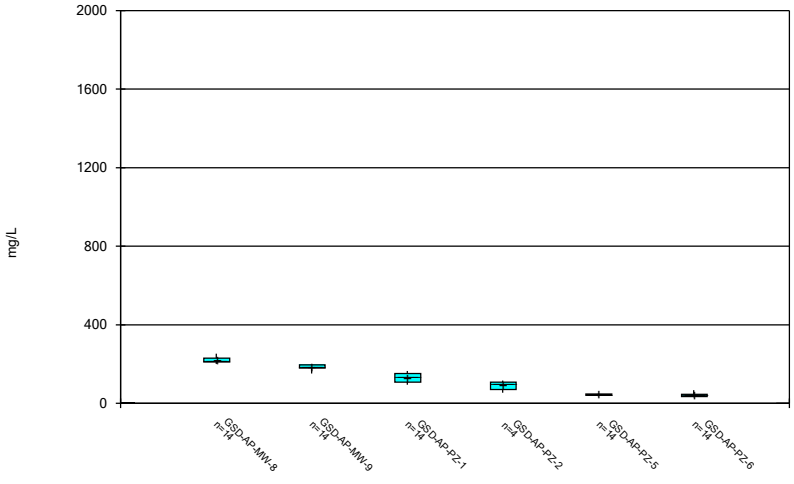
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 1/13/2022 1:53 PM
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE C.

Outlier Summary

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 1:50 PM

	GSD-AP-MW-8 Combined Radium 226 + 228 (pCi/L)
12/7/2017	7.45 (o)

FIGURE D.

Appendix III Welch's t-test/Mann-Whitney - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/16/2021, 2:09 PM

Constituent	Well	Calc.	0.01	Method
Fluoride (mg/L)	**GSD-AP-MW-1**	**2.958**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-1**	**-2.858**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-11**	**-2.642**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-3**	**-2.639**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-7**	**-2.855**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-8**	**-3.001**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-PZ-5**	**-2.708**	**Yes**	**Mann-W**

Appendix III Welch's t-test/Mann-Whitney - All Results

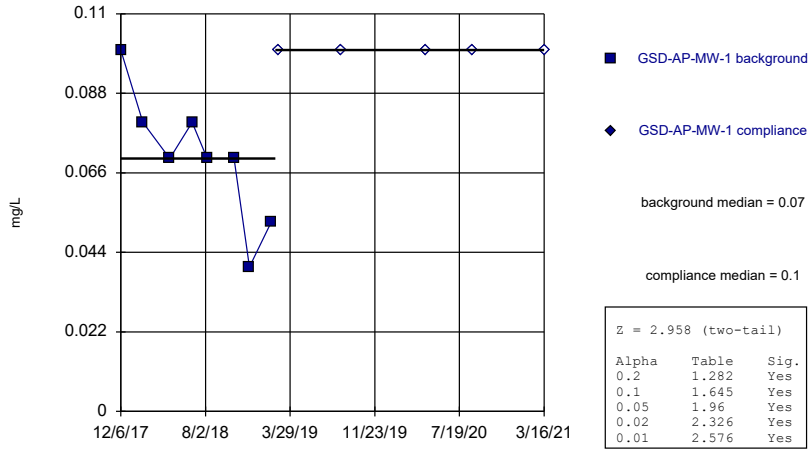
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/16/2021, 2:09 PM

Constituent	Well	Calc.	0.01	Method
Fluoride (mg/L)	**GSD-AP-MW-1**	**2.958**	**Yes**	**Mann-W**
Fluoride (mg/L)	GSD-AP-MW-10	1.248	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-11	2.317	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-12	0.6325	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-14 (bg)	-2.005	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-16 (bg)	-1.313	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-17 (bg)	-1.84	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-2	0.07329	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-3	0.3267	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-4	0.0737	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-5	0.6633	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-6	2.495	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-7	0.2217	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-8	-1.982	No	Mann-W
Fluoride (mg/L)	GSD-AP-MW-9	1.702	No	Mann-W
Fluoride (mg/L)	GSD-AP-PZ-1	-1.709	No	Mann-W
Fluoride (mg/L)	GSD-AP-PZ-5	2.386	No	Mann-W
Fluoride (mg/L)	GSD-AP-PZ-6	2.451	No	Mann-W
pH (pH)	**GSD-AP-MW-1**	**-2.858**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-10	0.6615	No	Mann-W
pH (pH)	**GSD-AP-MW-11**	**-2.642**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-12	-0.3665	No	Mann-W
pH (pH)	GSD-AP-MW-14 (bg)	-2.436	No	Mann-W
pH (pH)	GSD-AP-MW-16 (bg)	-2.052	No	Mann-W
pH (pH)	GSD-AP-MW-17 (bg)	-1.391	No	Mann-W
pH (pH)	GSD-AP-MW-2	-1.466	No	Mann-W
pH (pH)	**GSD-AP-MW-3**	**-2.639**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-4	0.5872	No	Mann-W
pH (pH)	GSD-AP-MW-5	-0.8894	No	Mann-W
pH (pH)	GSD-AP-MW-6	-2.126	No	Mann-W
pH (pH)	**GSD-AP-MW-7**	**-2.855**	**Yes**	**Mann-W**
pH (pH)	**GSD-AP-MW-8**	**-3.001**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-MW-9	-2.014	No	Mann-W
pH (pH)	GSD-AP-PZ-1	-2.569	No	Mann-W
pH (pH)	**GSD-AP-PZ-5**	**-2.708**	**Yes**	**Mann-W**
pH (pH)	GSD-AP-PZ-6	-1.69	No	Mann-W

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-1



Z = 2.958 (two-tail)

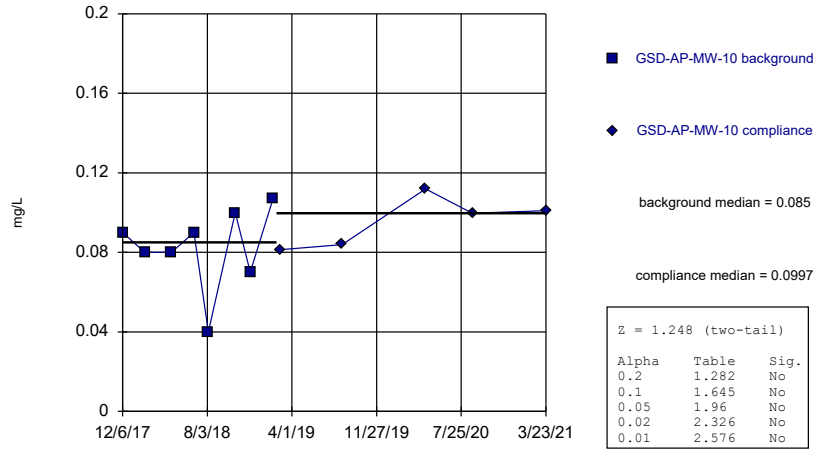
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-10



Z = 1.248 (two-tail)

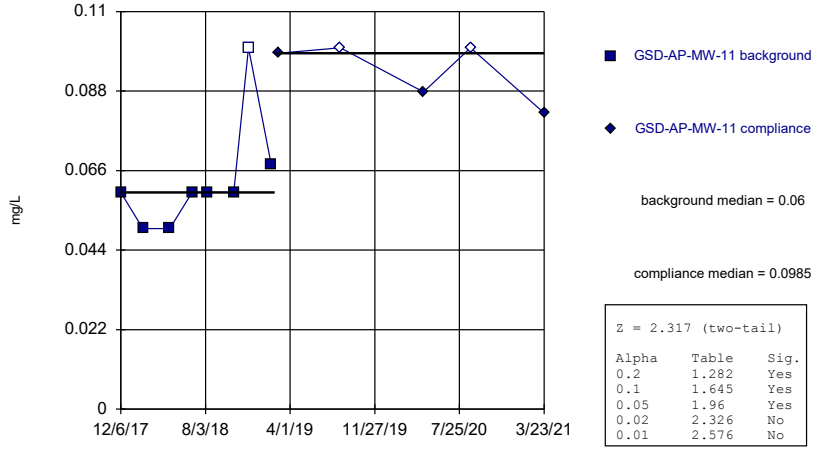
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-11



Z = 2.317 (two-tail)

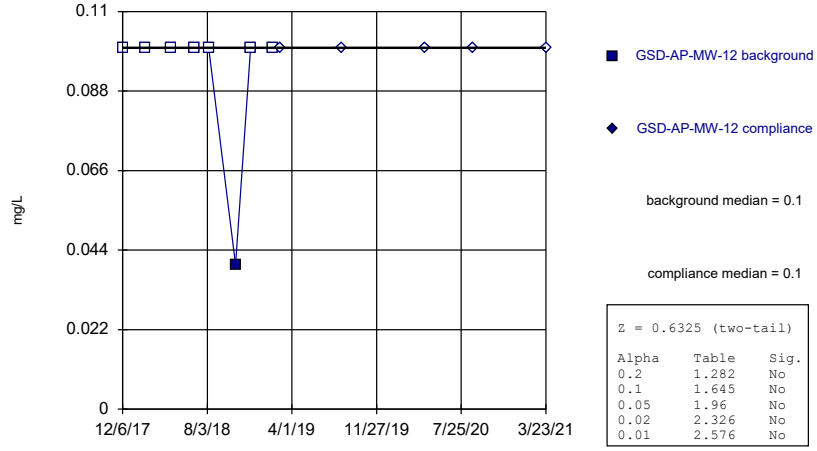
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-12



Z = 0.6325 (two-tail)

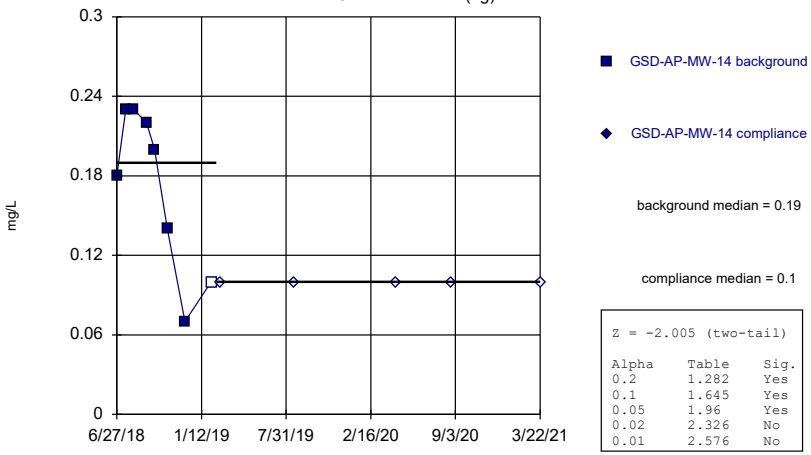
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-14 (bg)



Z = -2.005 (two-tail)

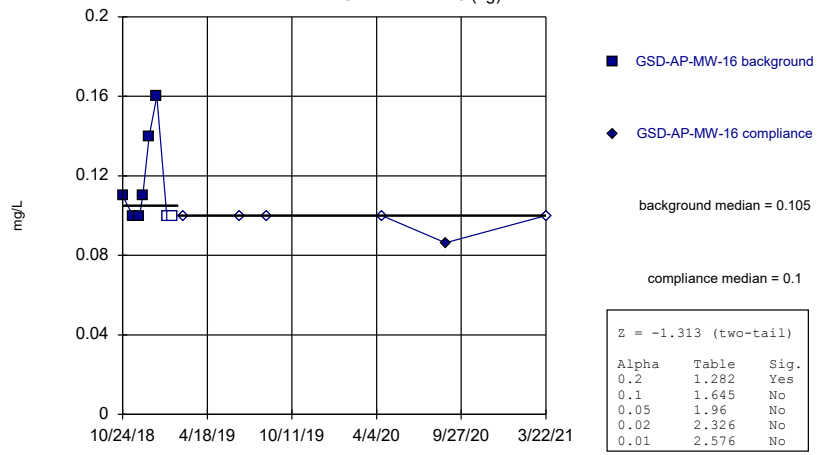
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-16 (bg)



Z = -1.313 (two-tail)

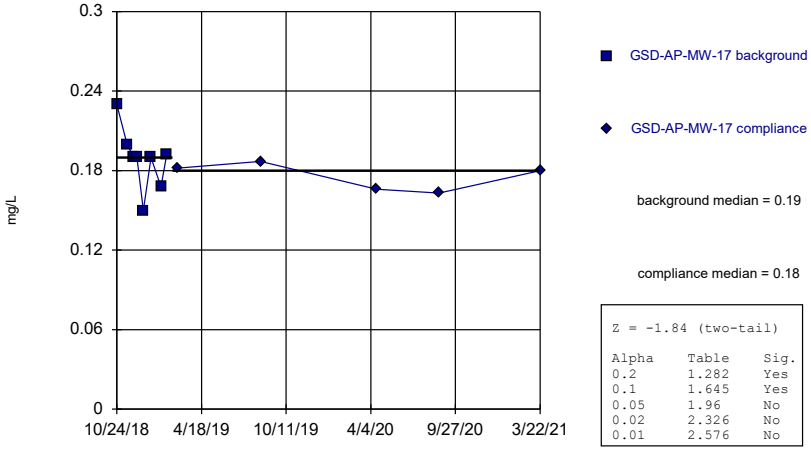
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-17 (bg)



Z = -1.84 (two-tail)

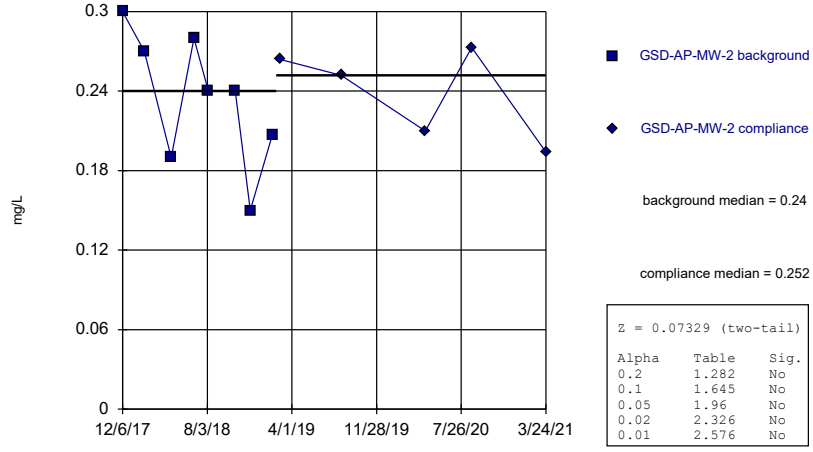
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-2



Z = 0.07329 (two-tail)

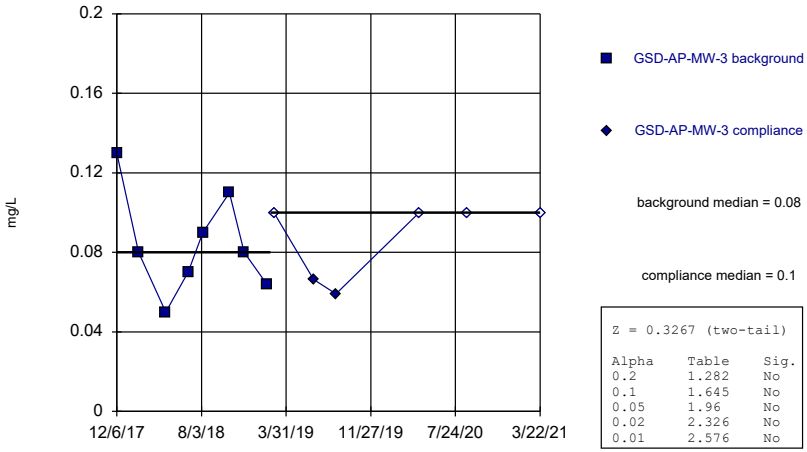
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-3



Z = 0.3267 (two-tail)

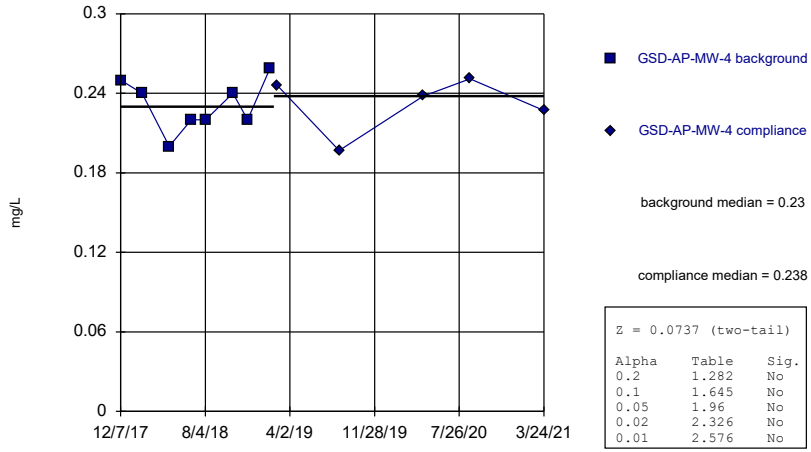
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-4



Z = 0.0737 (two-tail)

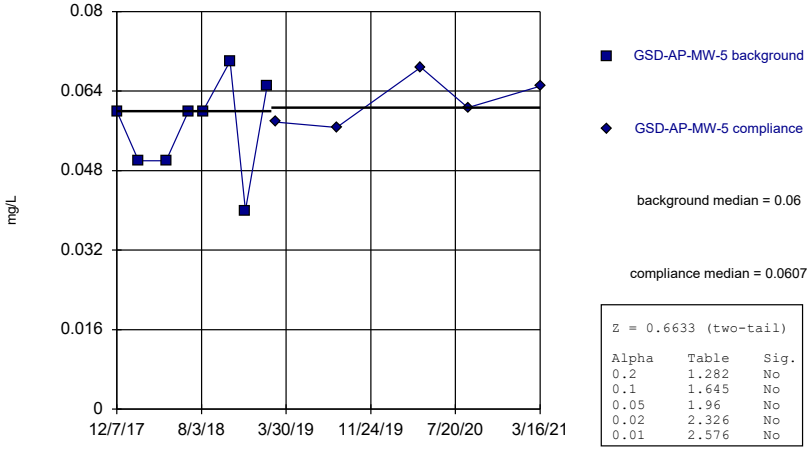
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-5



Z = 0.6633 (two-tail)

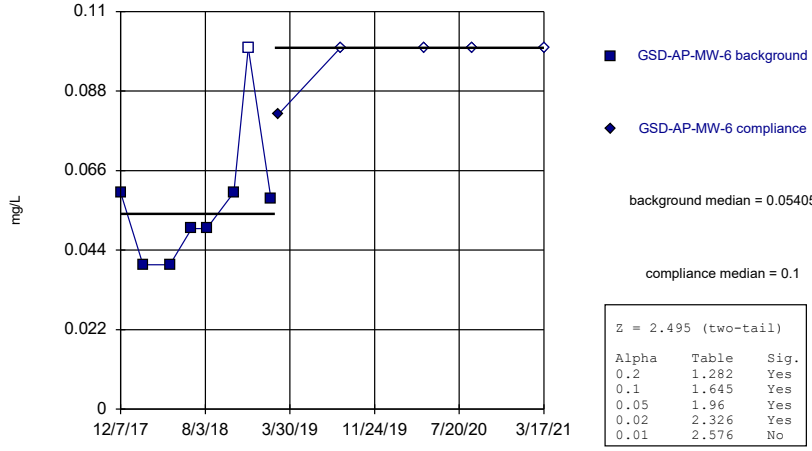
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-6



Z = 2.495 (two-tail)

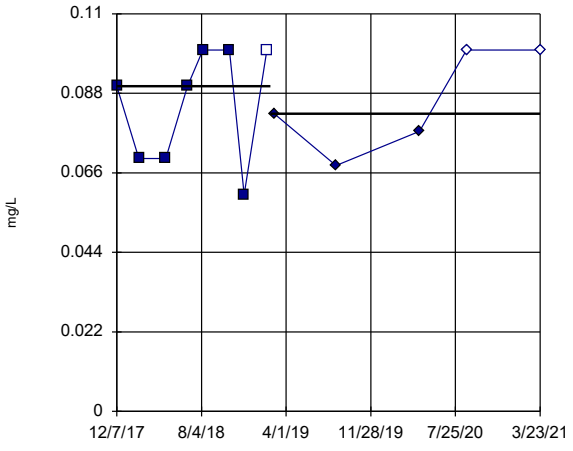
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-7



GSD-AP-MW-7 background

GSD-AP-MW-7 compliance

background median = 0.09

compliance median = 0.0824

Z = 0.2217 (two-tail)

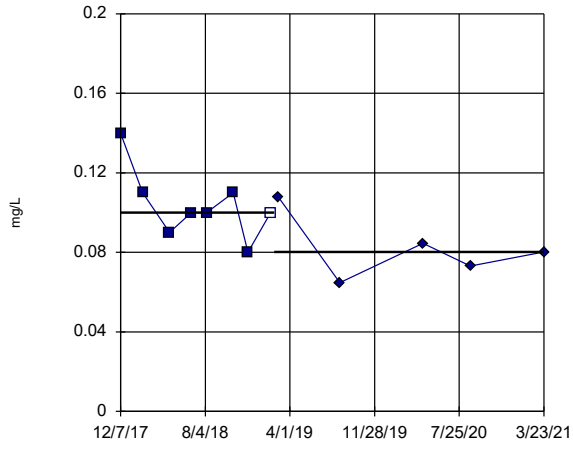
Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-8



GSD-AP-MW-8 background

GSD-AP-MW-8 compliance

background median = 0.1

compliance median = 0.0802

Z = -1.982 (two-tail)

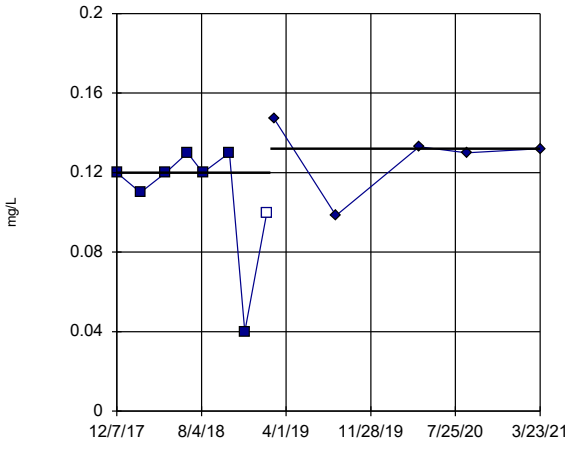
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-9



GSD-AP-MW-9 background

GSD-AP-MW-9 compliance

background median = 0.12

compliance median = 0.132

Z = 1.702 (two-tail)

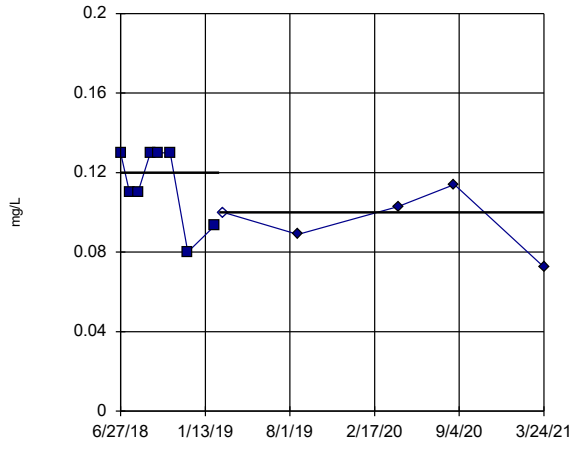
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-PZ-1



GSD-AP-PZ-1 background

GSD-AP-PZ-1 compliance

background median = 0.12

compliance median = 0.1

Z = -1.709 (two-tail)

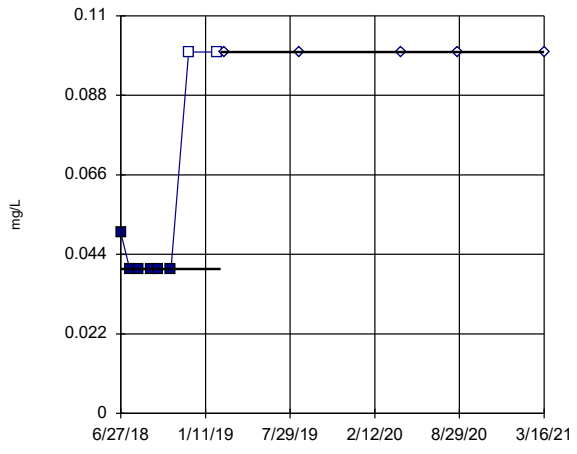
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-PZ-5



GSD-AP-PZ-5 background

GSD-AP-PZ-5 compliance

background median = 0.04

compliance median = 0.1

Z = 2.386 (two-tail)

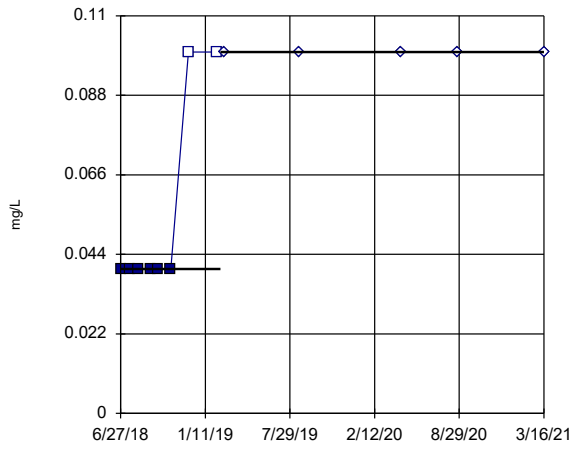
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-PZ-6



GSD-AP-PZ-6 background

GSD-AP-PZ-6 compliance

background median = 0.04

compliance median = 0.1

Z = 2.451 (two-tail)

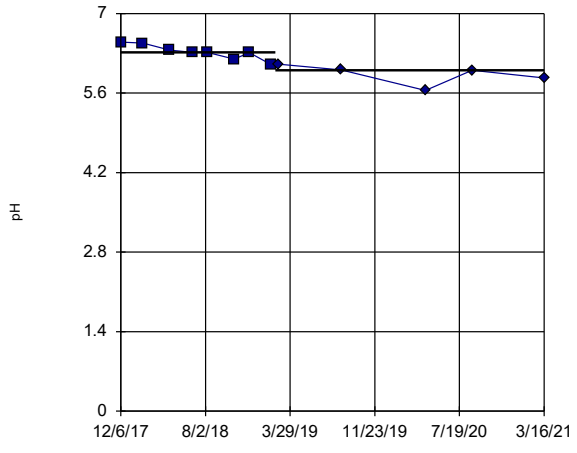
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: Fluoride Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-1



GSD-AP-MW-1 background

GSD-AP-MW-1 compliance

background median = 6.32

compliance median = 6

Z = -2.858 (two-tail)

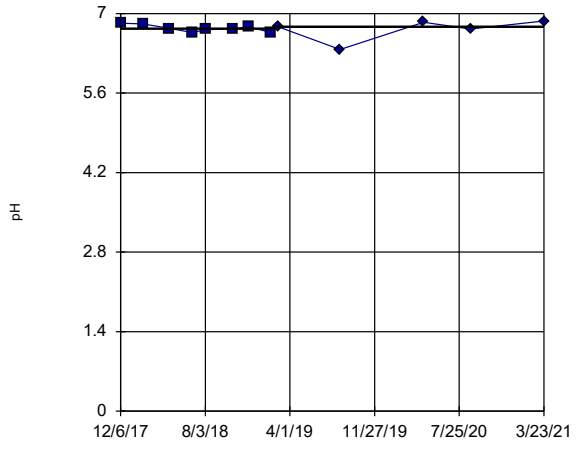
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-10



GSD-AP-MW-10 background

GSD-AP-MW-10 compliance

background median = 6.735

compliance median = 6.77

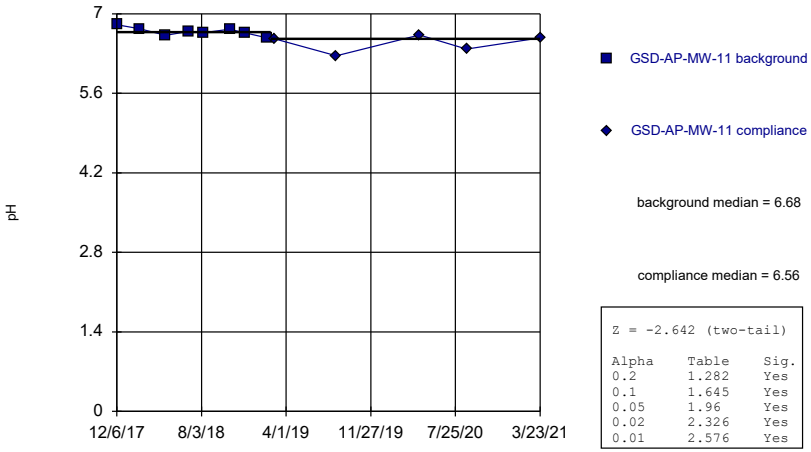
Z = 0.6615 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-11

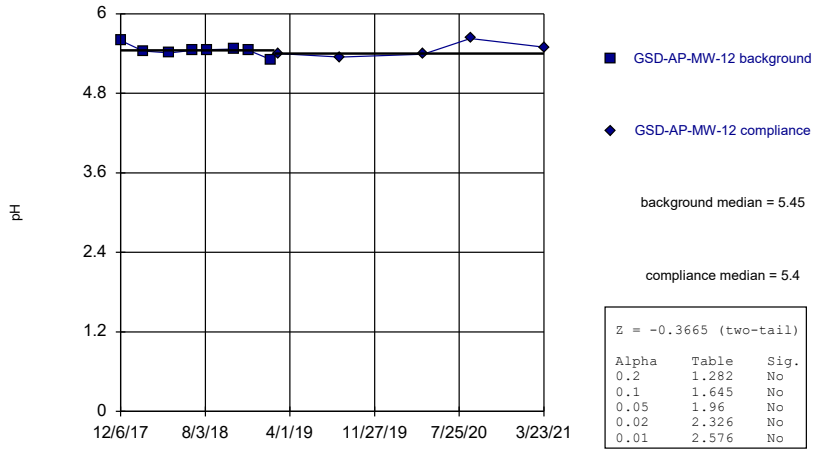


Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-12

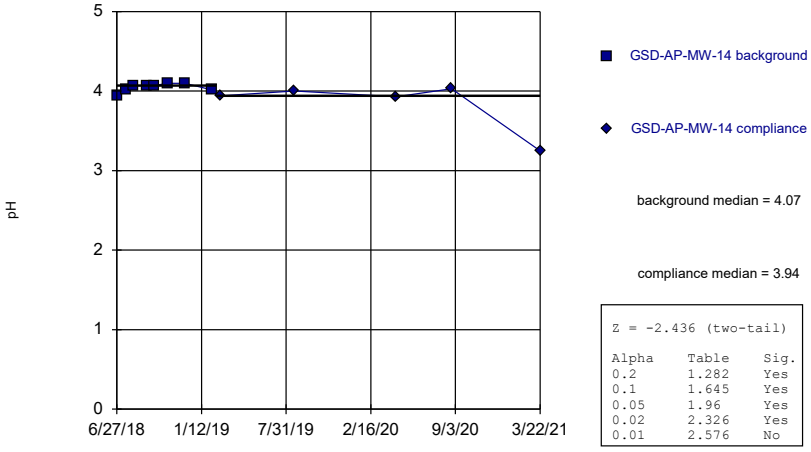


Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-14 (bg)

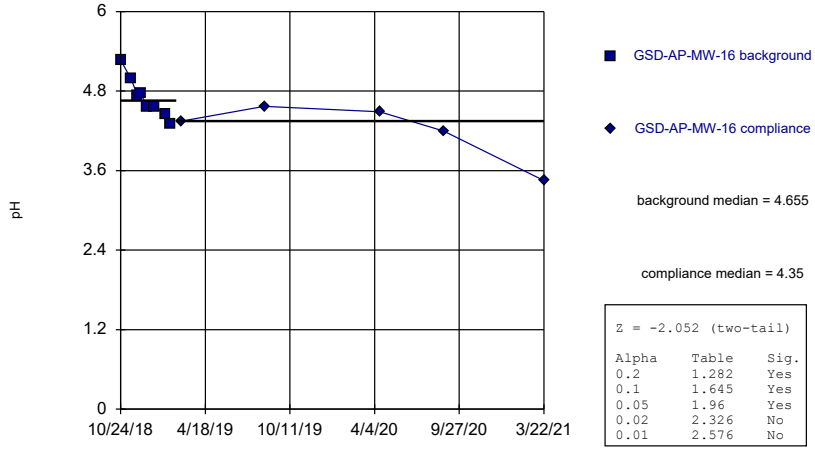


Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

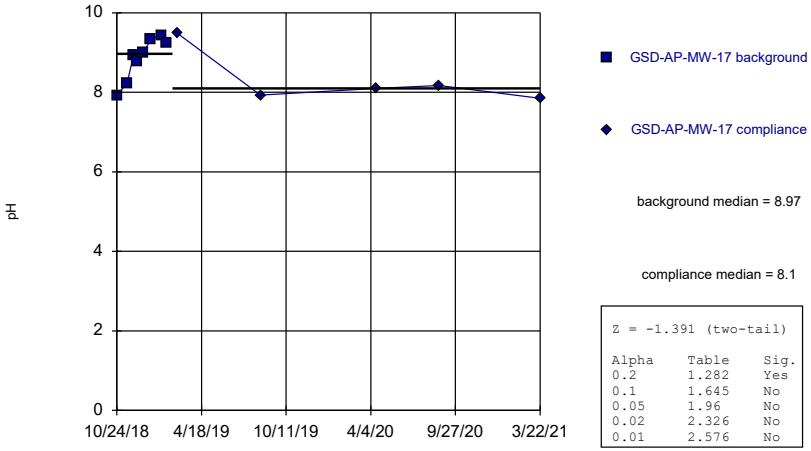
GSD-AP-MW-16 (bg)



Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-17 (bg)



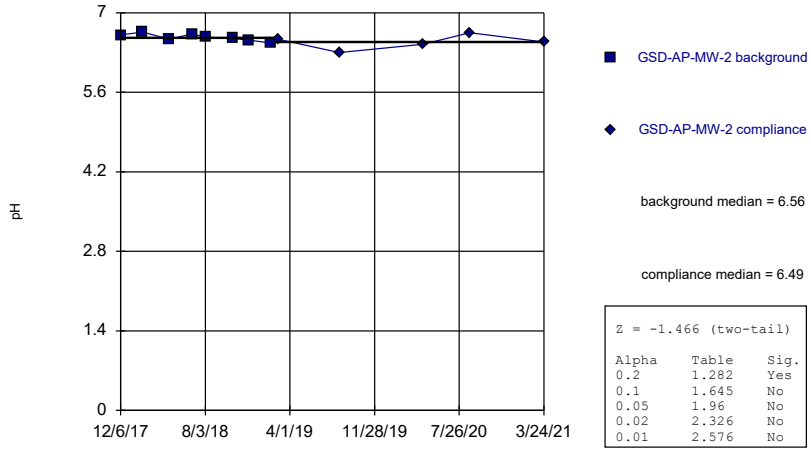
Z = -1.391 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-2



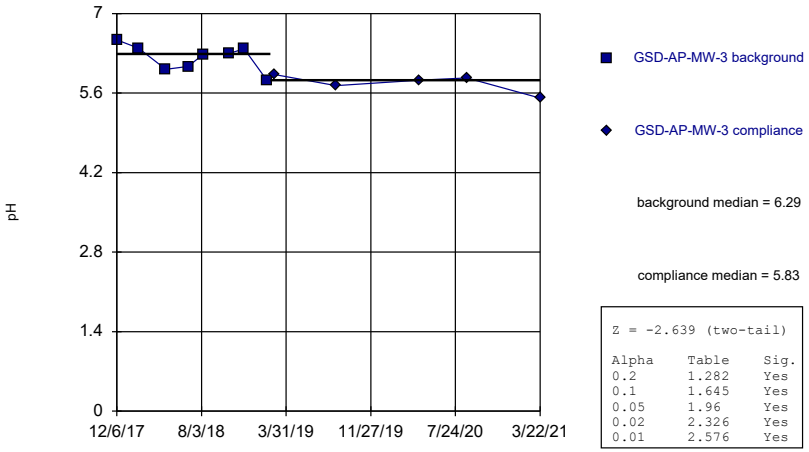
Z = -1.466 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:06 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-3



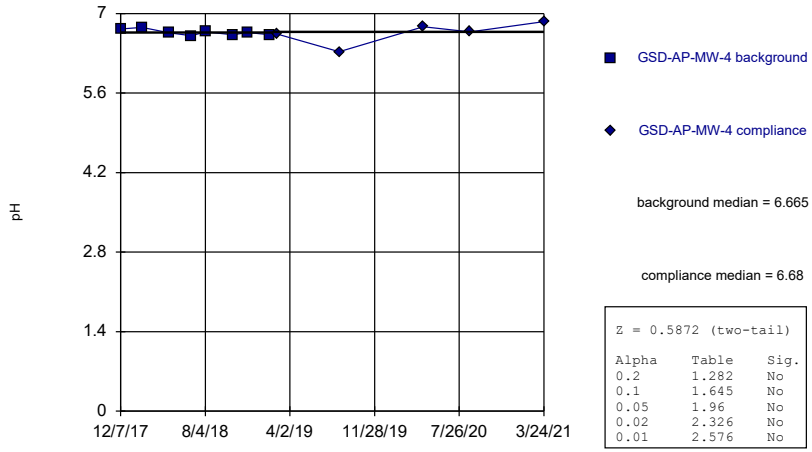
Z = -2.639 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-4



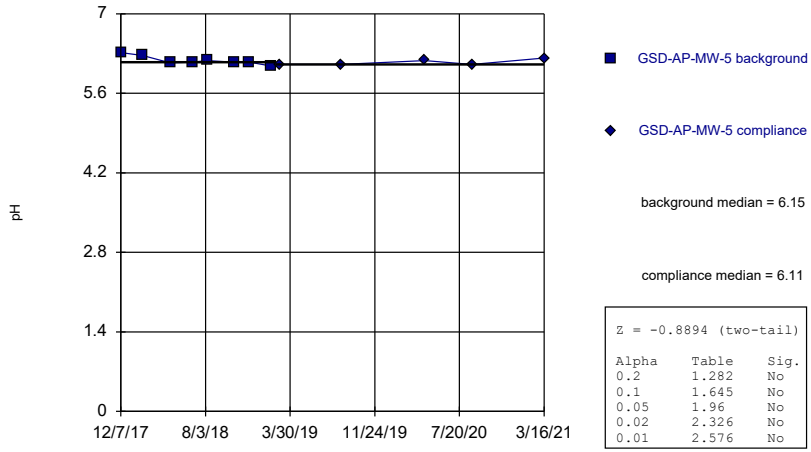
Z = 0.5872 (two-tail)

Alpha	Table	Sig.
0.2	1.282	No
0.1	1.645	No
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-5



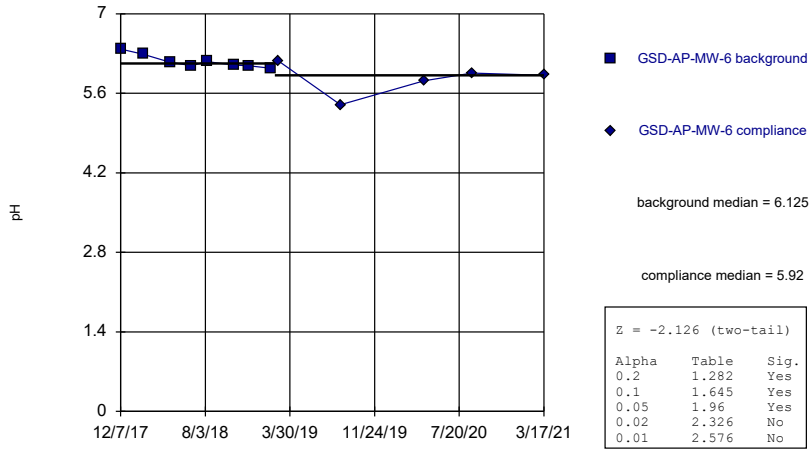
Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-6



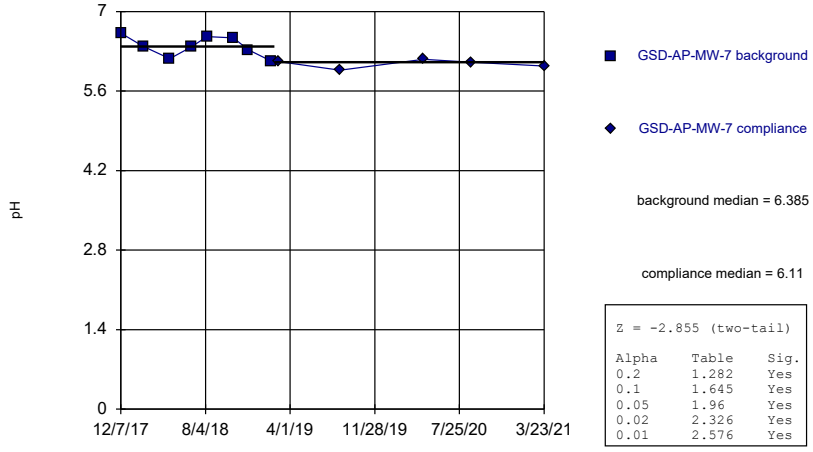
Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-7



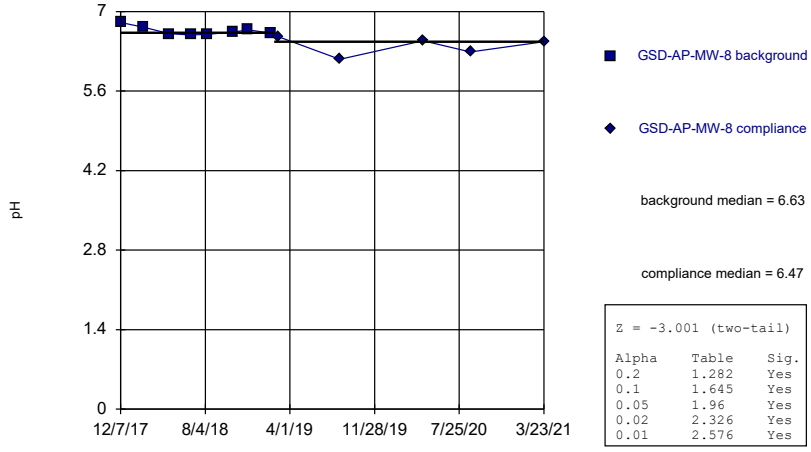
Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-8

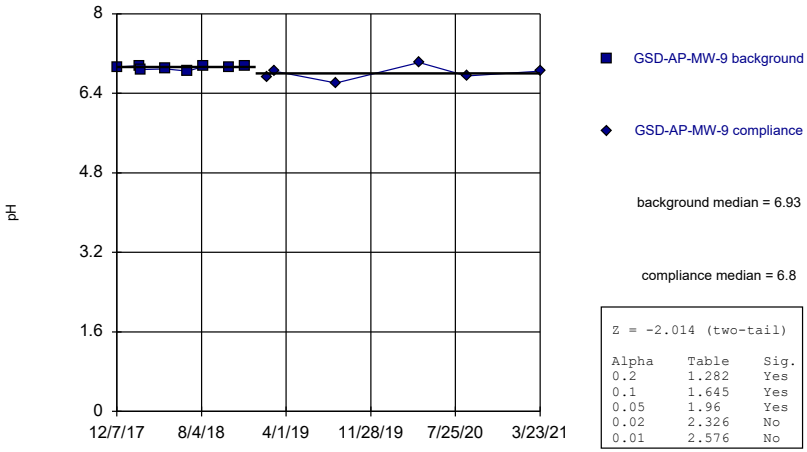


Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-MW-9



Z = -2.014 (two-tail)

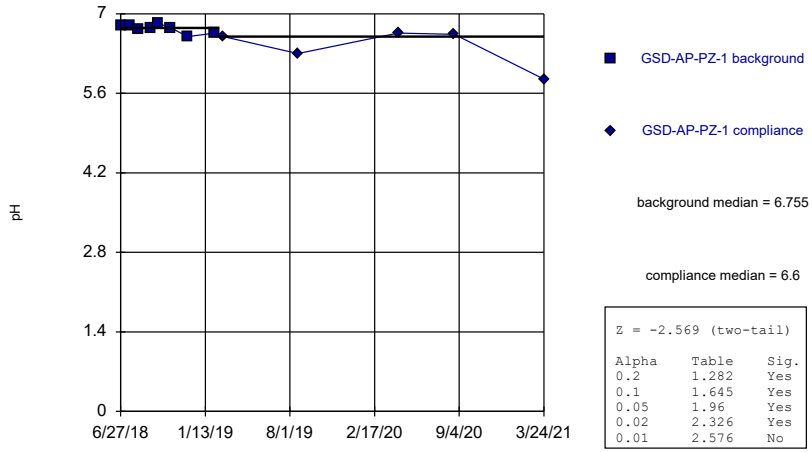
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-PZ-1



Z = -2.569 (two-tail)

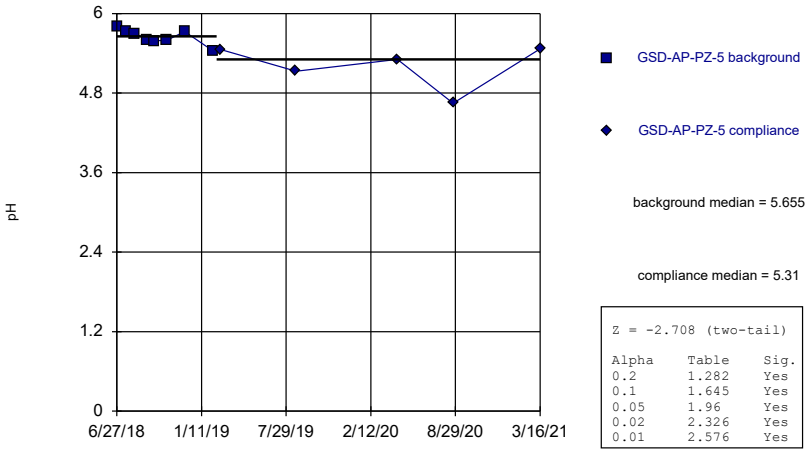
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-PZ-5



Z = -2.708 (two-tail)

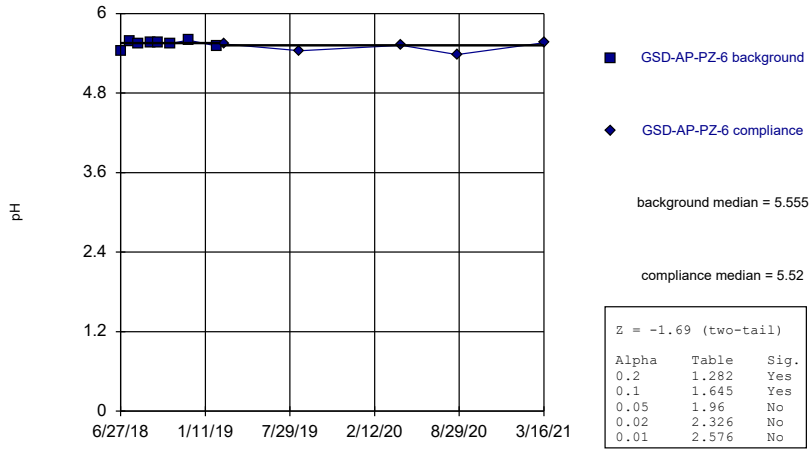
Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	Yes
0.02	2.326	Yes
0.01	2.576	Yes

Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.30 Groundwater Stats Consulting. UG

Mann-Whitney (Wilcoxon Rank Sum)

GSD-AP-PZ-6



Z = -1.69 (two-tail)

Alpha	Table	Sig.
0.2	1.282	Yes
0.1	1.645	Yes
0.05	1.96	No
0.02	2.326	No
0.01	2.576	No

Constituent: pH Analysis Run 7/16/2021 2:07 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	0.1	
2/6/2018	0.08 (J)	
4/23/2018	0.07 (J)	
6/26/2018	0.08 (J)	
8/7/2018	0.07 (J)	
10/22/2018	0.07 (J)	
12/4/2018	0.04 (J)	
2/5/2019	0.0525 (J)	
2/26/2019		<0.1
8/21/2019		<0.1
4/15/2020		<0.1
8/25/2020		<0.1
3/16/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	0.09 (J)	
2/7/2018	0.08 (J)	
4/24/2018	0.08 (J)	
6/27/2018	0.09 (J)	
8/7/2018	0.04 (J)	
10/22/2018	0.1	
12/4/2018	0.07 (J)	
2/6/2019	0.107	
2/26/2019		0.0813 (J)
8/22/2019		0.084 (J)
4/15/2020		0.112
8/26/2020		0.0997 (J)
3/23/2021		0.101

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	0.06 (J)	
2/7/2018	0.05 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/8/2018	0.06 (J)	
10/23/2018	0.06 (J)	
12/4/2018	<0.1	
2/6/2019	0.0678 (J)	
2/27/2019		0.0985 (J)
8/22/2019		<0.1
4/14/2020		0.0878 (J)
8/26/2020		<0.1
3/23/2021		0.0819 (J)

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	<0.1	
2/8/2018	<0.1	
4/24/2018	<0.1	
6/27/2018	<0.1	
8/8/2018	<0.1	
10/23/2018	0.04 (J)	
12/5/2018	<0.1	
2/6/2019	<0.1	
2/27/2019		<0.1
8/22/2019		<0.1
4/14/2020		<0.1
8/26/2020		<0.1
3/23/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	0.18	
7/18/2018	0.23	
8/6/2018	0.23	
9/5/2018	0.22	
9/24/2018	0.2	
10/24/2018	0.14	
12/5/2018	0.07 (J)	
2/5/2019	<0.1	
2/28/2019		<0.1
8/20/2019		<0.1
4/16/2020		<0.1
8/25/2020		<0.1
3/22/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	0.11	
11/14/2018	0.1	
11/28/2018	0.1	
12/5/2018	0.11	
12/18/2018	0.14	
1/3/2019	0.16	
1/24/2019	<0.1	
2/5/2019	<0.1	
2/28/2019		<0.1
6/24/2019		<0.1 (D)
8/19/2019		<0.1
4/15/2020		<0.1
8/25/2020		0.0863 (J)
3/22/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	0.23	
11/14/2018	0.2	
11/28/2018	0.19	
12/5/2018	0.19	
12/18/2018	0.15	
1/3/2019	0.19	
1/24/2019	0.168	
2/5/2019	0.192	
2/28/2019		0.182
8/19/2019		0.187
4/16/2020		0.166
8/24/2020		0.163
3/22/2021		0.18

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	0.3	
2/6/2018	0.27	
4/23/2018	0.19	
6/27/2018	0.28	
8/7/2018	0.24	
10/22/2018	0.24	
12/4/2018	0.15	
2/5/2019	0.207	
2/26/2019		0.264
8/20/2019		0.252
4/15/2020		0.21
8/25/2020		0.273
3/24/2021		0.194

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	0.13	
2/6/2018	0.08 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.07 (J)	
8/7/2018	0.09 (J)	
10/22/2018	0.11	
12/3/2018	0.08 (J)	
2/5/2019	0.064 (J)	
2/25/2019		<0.1
6/18/2019		0.0664 (J)
8/20/2019		0.0592 (J)
4/13/2020		<0.1
8/26/2020		<0.1
3/22/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	0.25	
2/6/2018	0.24	
4/24/2018	0.2	
6/26/2018	0.22	
8/6/2018	0.22	
10/22/2018	0.24	
12/3/2018	0.22	
2/5/2019	0.259	
2/26/2019		0.246
8/20/2019		0.197
4/15/2020		0.238
8/26/2020		0.251
3/24/2021		0.227

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	0.06 (J)	
2/6/2018	0.05 (J)	
4/25/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/7/2018	0.06 (J)	
10/23/2018	0.07 (J)	
12/5/2018	0.04 (J)	
2/5/2019	0.0651 (J)	
2/27/2019		0.0578 (J)
8/20/2019		0.0567 (J)
4/13/2020		0.0688 (J)
8/24/2020		0.0607 (J)
3/16/2021		0.065 (J)

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	0.06 (J)	
2/8/2018	0.04 (J)	
4/25/2018	0.04 (J)	
6/26/2018	0.05 (J)	
8/7/2018	0.05 (J)	
10/23/2018	0.06 (J)	
12/3/2018	<0.1	
2/5/2019	0.0581 (J)	
2/26/2019		0.0816 (J)
8/20/2019		<0.1
4/13/2020		<0.1
8/26/2020		<0.1
3/17/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	0.09 (J)	
2/8/2018	0.07 (J)	
4/25/2018	0.07 (J)	
6/26/2018	0.09 (J)	
8/8/2018	0.1	
10/23/2018	0.1	
12/4/2018	0.06 (J)	
2/6/2019	<0.1	
2/27/2019		0.0824 (J)
8/21/2019		0.068 (J)
4/15/2020		0.0775 (J)
8/26/2020		<0.1
3/23/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	0.14	
2/8/2018	0.11	
4/25/2018	0.09 (J)	
6/26/2018	0.1	
8/8/2018	0.1	
10/23/2018	0.11	
12/4/2018	0.08 (J)	
2/6/2019	<0.1	
2/27/2019		0.108
8/21/2019		0.0648 (J)
4/14/2020		0.0845 (J)
8/26/2020		0.0732 (J)
3/23/2021		0.0802 (J)

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	0.12	
2/12/2018	0.11	
4/25/2018	0.12	
6/26/2018	0.13	
8/8/2018	0.12	
10/23/2018	0.13	
12/5/2018	0.04 (J)	
2/6/2019	<0.1	
2/27/2019		0.147
8/21/2019		0.0984 (J)
4/14/2020		0.133
8/26/2020		0.13
3/23/2021		0.132

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	0.13	
7/18/2018	0.11	
8/7/2018	0.11	
9/5/2018	0.13	
9/24/2018	0.13	
10/22/2018	0.13	
12/3/2018	0.08 (J)	
2/5/2019	0.0934 (J)	
2/25/2019		<0.1
8/20/2019		0.0889 (J)
4/13/2020		0.103
8/24/2020		0.114
3/24/2021		0.0725 (J)

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	0.05 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.1	
2/7/2019	<0.1	
2/25/2019		<0.1
8/21/2019		<0.1
4/15/2020		<0.1
8/24/2020		<0.1
3/16/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: Fluoride (mg/L) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	0.04 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.1	
2/7/2019	<0.1	
2/25/2019		<0.1
8/21/2019		<0.1
4/15/2020		<0.1
8/24/2020		<0.1
3/16/2021		<0.1

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	6.5	
2/6/2018	6.48	
4/23/2018	6.36	
6/26/2018	6.32	
8/7/2018	6.32	
10/22/2018	6.2	
12/4/2018	6.31	
2/5/2019	6.1	
2/26/2019		6.11
8/21/2019		6.01
4/15/2020		5.65
8/25/2020		6
3/16/2021		5.87

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	6.83	
2/7/2018	6.82	
4/24/2018	6.74	
6/27/2018	6.67	
8/7/2018	6.72	
10/22/2018	6.73	
12/4/2018	6.77	
2/6/2019	6.67	
2/26/2019		6.77
8/22/2019		6.37
4/15/2020		6.85
8/26/2020		6.73
3/23/2021		6.87

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	6.81	
2/7/2018	6.74	
4/24/2018	6.62	
6/27/2018	6.69	
8/8/2018	6.67	
10/23/2018	6.73	
12/4/2018	6.67	
2/6/2019	6.58	
2/27/2019		6.56
8/22/2019		6.26
4/14/2020		6.63
8/26/2020		6.38
3/23/2021		6.58

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	5.6	
2/8/2018	5.44	
4/24/2018	5.41	
6/27/2018	5.45	
8/8/2018	5.46	
10/23/2018	5.47	
12/5/2018	5.45	
2/6/2019	5.31	
2/27/2019		5.4
8/22/2019		5.35
4/14/2020		5.39
8/26/2020		5.63
3/23/2021		5.5

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	3.95	
7/18/2018	4.02	
8/6/2018	4.07	
9/5/2018	4.07	
9/24/2018	4.07	
10/24/2018	4.1	
12/5/2018	4.1	
2/5/2019	4.02	
2/28/2019		3.94 (E)
8/20/2019		4
4/16/2020		3.93
8/25/2020		4.03
3/22/2021		3.25

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	5.27	
11/14/2018	4.99	
11/28/2018	4.74	
12/5/2018	4.76	
12/18/2018	4.57	
1/3/2019	4.56	
1/24/2019	4.45	
2/5/2019	4.3	
2/28/2019		4.35
8/19/2019		4.57
4/15/2020		4.49
8/25/2020		4.2
3/22/2021		3.45

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	7.92	
11/14/2018	8.23	
11/28/2018	8.95	
12/5/2018	8.77	
12/18/2018	8.99	
1/3/2019	9.35	
1/24/2019	9.42	
2/5/2019	9.23	
2/28/2019		9.48
8/19/2019		7.93
4/16/2020		8.1
8/24/2020		8.17
3/22/2021		7.85

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	6.61	
2/6/2018	6.66	
4/23/2018	6.54	
6/27/2018	6.63	
8/7/2018	6.57	
10/22/2018	6.55	
12/4/2018	6.52	
2/5/2019	6.47	
2/26/2019		6.54
8/20/2019		6.3
4/15/2020		6.45
8/25/2020		6.65
3/24/2021		6.49

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	6.54	
2/6/2018	6.39	
4/24/2018	6.02	
6/27/2018	6.07	
8/7/2018	6.28	
10/22/2018	6.3	
12/3/2018	6.38	
2/5/2019	5.83	
2/25/2019		5.93
8/20/2019		5.73
4/13/2020		5.83
8/26/2020		5.87
3/22/2021		5.51

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	6.73	
2/6/2018	6.76	
4/24/2018	6.66	
6/26/2018	6.61	
8/6/2018	6.68	
10/22/2018	6.63	
12/3/2018	6.67	
2/5/2019	6.63	
2/26/2019		6.64
8/20/2019		6.33
4/15/2020		6.77
8/26/2020		6.68
3/24/2021		6.86

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	6.32	
2/6/2018	6.27	
4/25/2018	6.14	
6/27/2018	6.15	
8/7/2018	6.18	
10/23/2018	6.15	
12/5/2018	6.15	
2/5/2019	6.08	
2/27/2019		6.11
8/20/2019		6.11
4/13/2020		6.18
8/24/2020		6.11
3/16/2021		6.22

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	6.38	
2/8/2018	6.29	
4/25/2018	6.15	
6/26/2018	6.09	
8/7/2018	6.16	
10/23/2018	6.1	
12/3/2018	6.09	
2/5/2019	6.04	
2/26/2019		6.17
8/20/2019		5.4
4/13/2020		5.82
8/26/2020		5.96
3/17/2021		5.92

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	6.62	
2/8/2018	6.39	
4/25/2018	6.17	
6/26/2018	6.38	
8/8/2018	6.56	
10/23/2018	6.54	
12/4/2018	6.33	
2/6/2019	6.13	
2/27/2019		6.12
8/21/2019		5.97
4/15/2020		6.16
8/26/2020		6.11
3/23/2021		6.04

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	6.81	
2/8/2018	6.73	
4/25/2018	6.61	
6/26/2018	6.59	
8/8/2018	6.6	
10/23/2018	6.64	
12/4/2018	6.68	
2/6/2019	6.62	
2/27/2019		6.56
8/21/2019		6.16
4/14/2020		6.49
8/26/2020		6.29
3/23/2021		6.47

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	6.93	
2/8/2018	6.96	
2/12/2018	6.88	
4/25/2018	6.89	
6/26/2018	6.85	
8/8/2018	6.94	
10/23/2018	6.93	
12/5/2018	6.94	
2/6/2019		6.73
2/27/2019		6.85
8/21/2019		6.61
4/14/2020		7.02
8/26/2020		6.75
3/23/2021		6.85

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	6.79	
7/18/2018	6.8	
8/7/2018	6.73	
9/5/2018	6.75	
9/24/2018	6.83	
10/22/2018	6.76	
12/3/2018	6.6	
2/5/2019	6.66	
2/25/2019		6.6
8/20/2019		6.3
4/13/2020		6.66
8/24/2020		6.64
3/24/2021		5.85

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	5.81	
7/18/2018	5.74	
8/8/2018	5.7	
9/5/2018	5.61	
9/24/2018	5.59	
10/23/2018	5.6	
12/3/2018	5.73	
2/7/2019	5.44	
2/25/2019		5.46
8/21/2019		5.13
4/15/2020		5.31
8/24/2020		4.65
3/16/2021		5.47

Mann-Whitney (Wilcoxon Rank Sum)

Constituent: pH (pH) Analysis Run 7/16/2021 2:09 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	5.44	
7/18/2018	5.58	
8/8/2018	5.55	
9/5/2018	5.56	
9/24/2018	5.57	
10/23/2018	5.55	
12/3/2018	5.6	
2/7/2019	5.51	
2/25/2019		5.54
8/21/2019		5.44
4/15/2020		5.52
8/24/2020		5.38
3/16/2021		5.56

FIGURE E.

Appendix III - Upgradient Well Trend Tests - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Upgradient Well Trend Tests - All Results

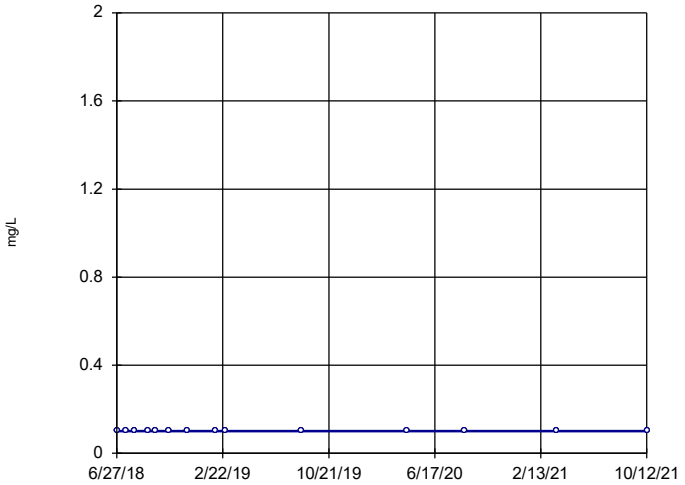
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:29 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	48	No	14	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.02049	44	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.001687	-35	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-1.044	-16	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.5887	-13	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.622	25	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.02255	13	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.04562	-7	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-4.795	-10	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	29.67	42	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-1.162	-42	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-10.61	-11	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	26.27	37	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-3.097	-18	-48	No	14	0	n/a	n/a	0.01	NP

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 48

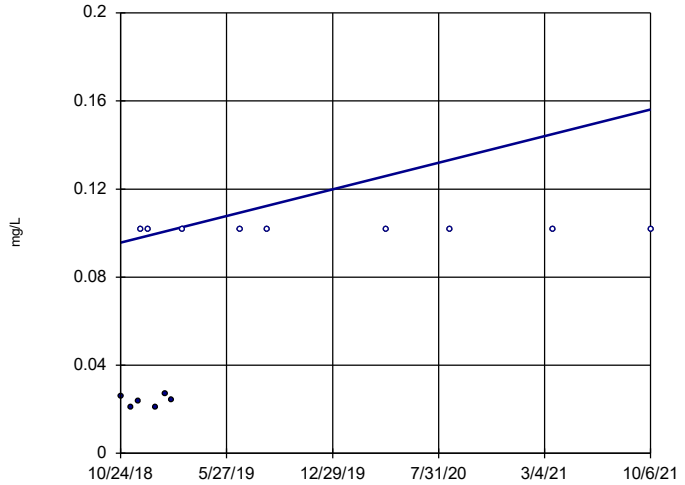
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 0.02049 units per year.

Mann-Kendall statistic = 44
critical = 53

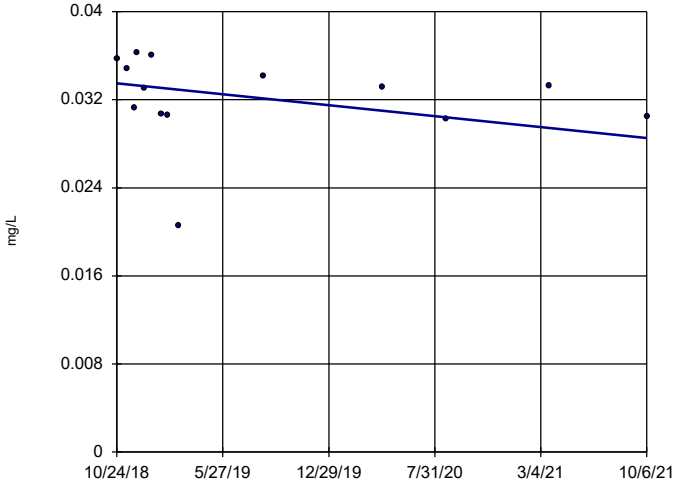
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -0.001687 units per year.

Mann-Kendall statistic = -35
critical = -48

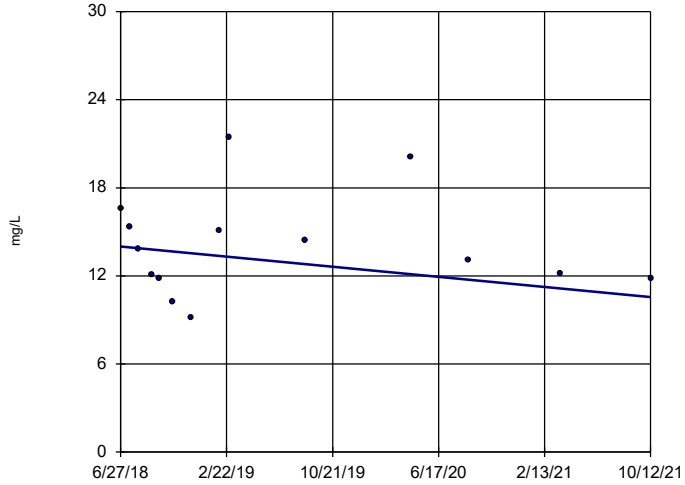
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -1.044 units per year.

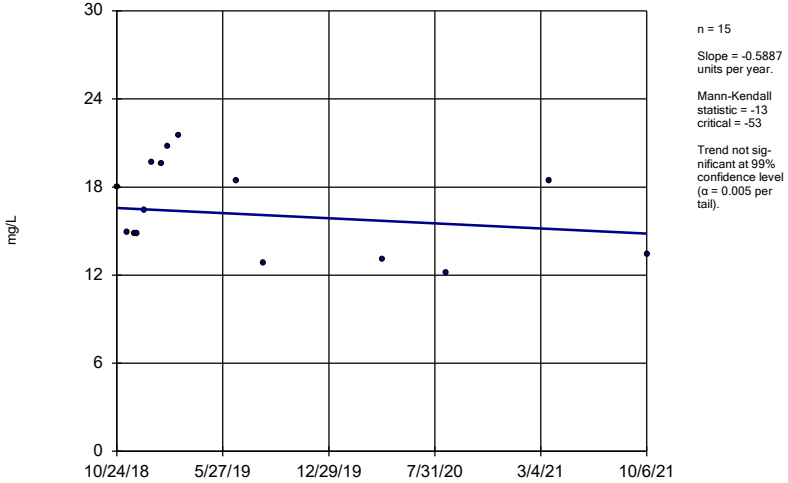
Mann-Kendall statistic = -16
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = -0.5887 units per year.

Mann-Kendall statistic = -13
critical = -53

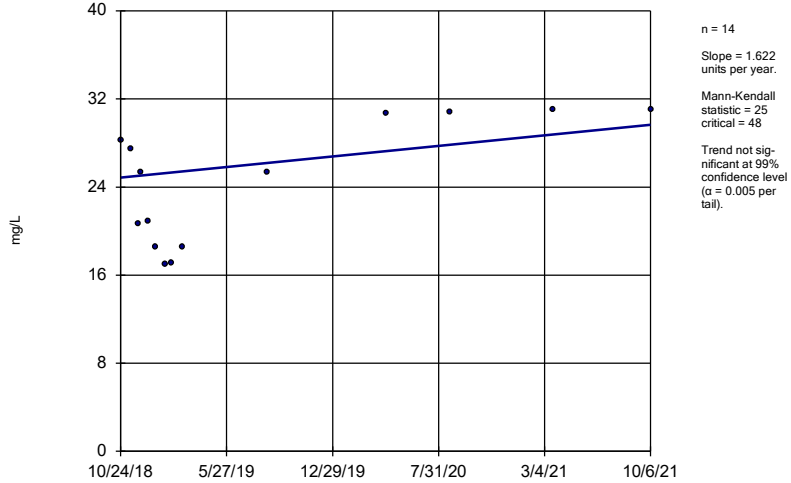
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = 1.622 units per year.

Mann-Kendall statistic = 25
critical = 48

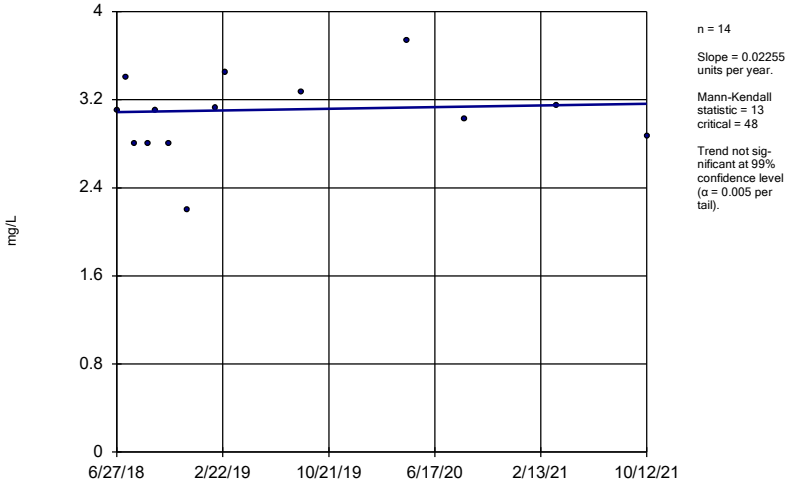
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = 0.02255 units per year.

Mann-Kendall statistic = 13
critical = 48

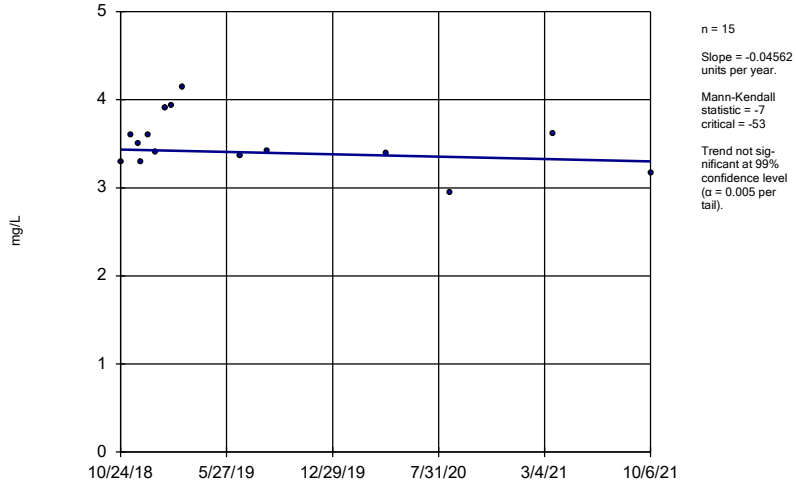
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = -0.04562 units per year.

Mann-Kendall statistic = -7
critical = -53

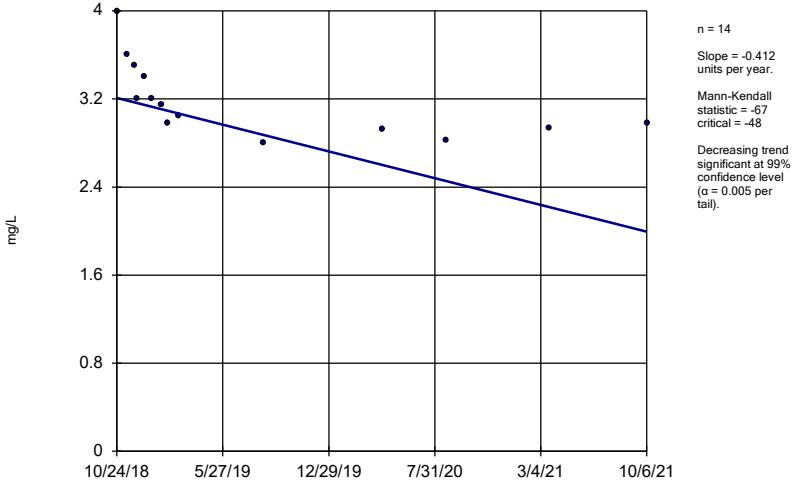
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -0.412 units per year.

Mann-Kendall statistic = -67 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

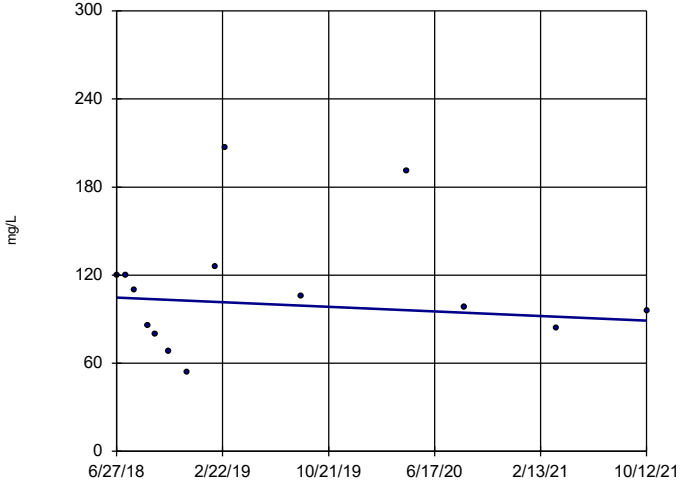
Constituent: Chloride Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -4.795 units per year.

Mann-Kendall statistic = -10 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

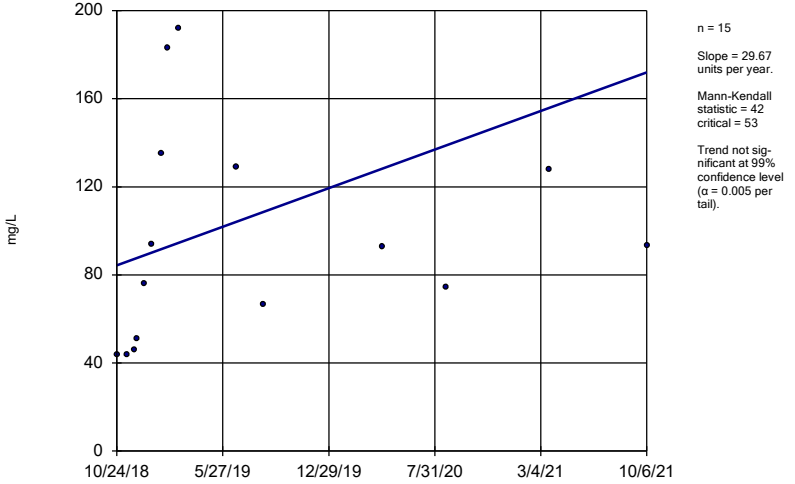
Constituent: Sulfate Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 29.67 units per year.

Mann-Kendall statistic = 42 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

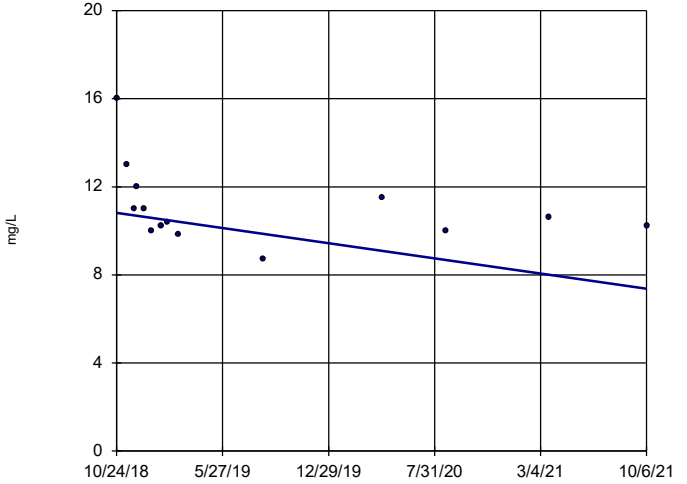
Constituent: Sulfate Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -1.162 units per year.

Mann-Kendall statistic = -42 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

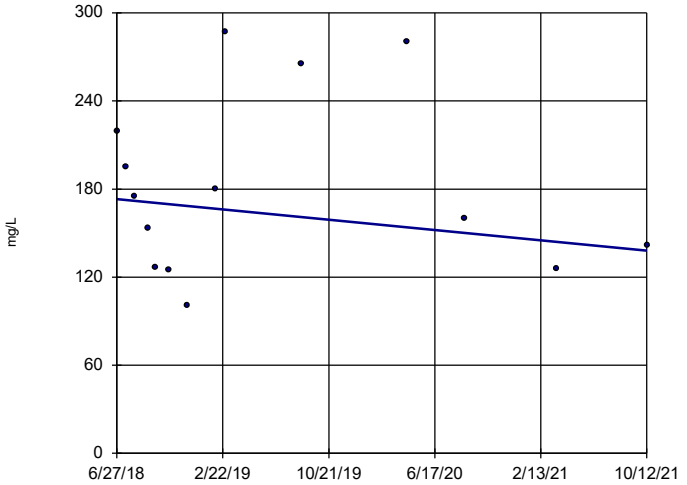
Constituent: Sulfate Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Wells

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -10.61 units per year.

Mann-Kendall statistic = -11 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

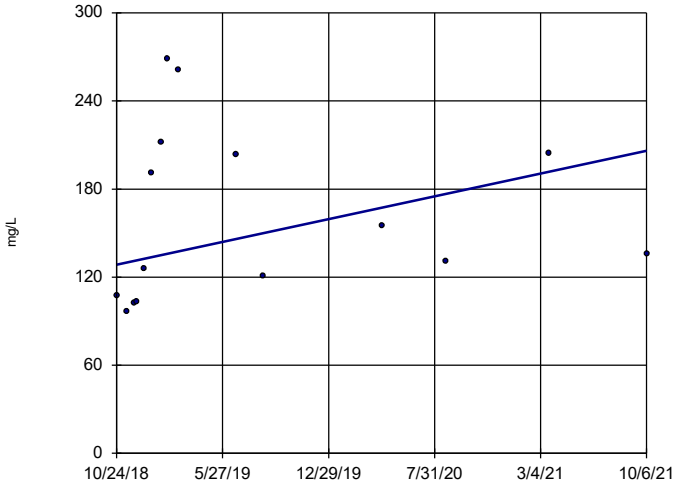
Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Well

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 26.27 units per year.

Mann-Kendall statistic = 37 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

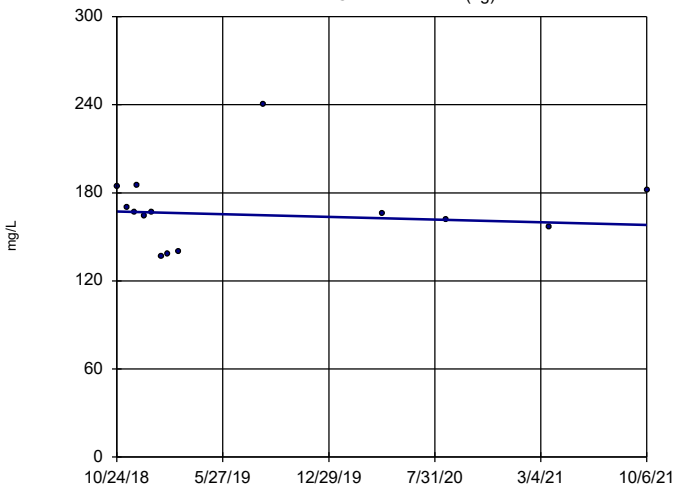
Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Well

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -3.097 units per year.

Mann-Kendall statistic = -18 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:28 PM View: Appendix III - Upgradient Well

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE F.

Appendix III - Intrawell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	**GSD-AP-MW-10**	**0.1381**	**n/a**	**10/11/2021**	**0.201**	**Yes**	**13**	**0.08731**	**0.01872**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.1122**	**n/a**	**10/12/2021**	**0.134**	**Yes**	**13**	**0.0646**	**0.01756**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	**GSD-AP-MW-5**	**0.08126**	**n/a**	**10/5/2021**	**0.122**	**Yes**	**13**	**0.05878**	**0.008293**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**10/5/2021**	**5.19**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Appendix III - Intrawell Prediction Limits - All Results

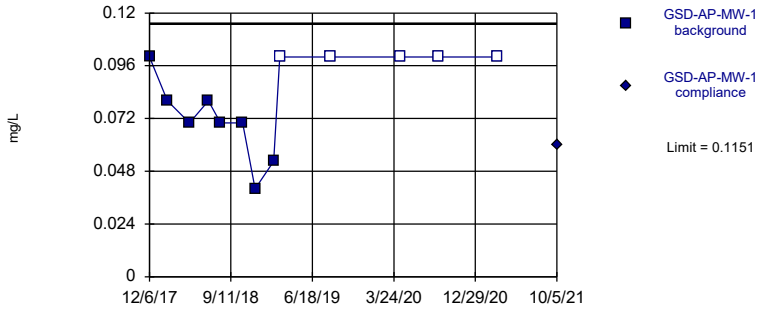
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 2:23 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	10/5/2021	0.0601J	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	**GSD-AP-MW-10**	**0.1381**	**n/a**	**10/11/2021**	**0.201**	**Yes**	**13**	**0.08731**	**0.01872**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.1122**	**n/a**	**10/12/2021**	**0.134**	**Yes**	**13**	**0.0646**	**0.01756**	**23.08**	**Kaplan-Meier**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	GSD-AP-MW-12	0.1	n/a	10/5/2021	0.1ND	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	10/12/2021	0.1ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.16	n/a	10/6/2021	0.1ND	No	14	n/a	n/a	50	n/a	n/a	0.008612	NP Intra (normality) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	10/6/2021	0.175	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	10/11/2021	0.283	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1327	n/a	10/5/2021	0.1ND	No	14	0.07516	0.0217	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	10/5/2021	0.214	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	**GSD-AP-MW-5**	**0.08126**	**n/a**	**10/5/2021**	**0.122**	**Yes**	**13**	**0.05878**	**0.008293**	**0**	**None**	**No**	**0.0005016**	**Param Intra 1 of 2**
Fluoride (mg/L)	GSD-AP-MW-6	0.08914	n/a	10/5/2021	0.1ND	No	13	0.05192	0.01373	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-7	0.109	n/a	10/5/2021	0.0933J	No	13	0.0755	0.01236	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-8	0.149	n/a	10/12/2021	0.123	No	13	0.09544	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1665	n/a	10/12/2021	0.147	No	13	0.01415	0.005005	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1606	n/a	10/5/2021	0.1ND	No	13	0.1071	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.1	n/a	10/12/2021	0.1ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.1	n/a	10/12/2021	0.1ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	10/5/2021	5.79	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	10/11/2021	6.72	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-11	7.012	6.206	10/12/2021	6.66	No	13	6.609	0.1486	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**10/5/2021**	**5.19**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-14	4.1	3.25	10/12/2021	4.04	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	10/6/2021	4.16	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	10/6/2021	7.92	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-2	6.801	6.273	10/11/2021	6.59	No	13	6.537	0.09742	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-3	6.88	5.224	10/5/2021	5.76	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	10/5/2021	6.58	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-5	6.352	5.982	10/5/2021	6.24	No	13	6.167	0.06836	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-6	6.703	5.385	10/5/2021	5.74	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-7	6.847	5.694	10/5/2021	6.06	No	13	6.271	0.2126	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-8	7.032	6.084	10/12/2021	6.61	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	10/12/2021	6.9	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	10/5/2021	6.46	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	10/12/2021	5.33	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-6	5.699	5.348	10/12/2021	5.41	No	13	5.523	0.06473	0	None	No	0.0002508	Param Intra 1 of 2

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



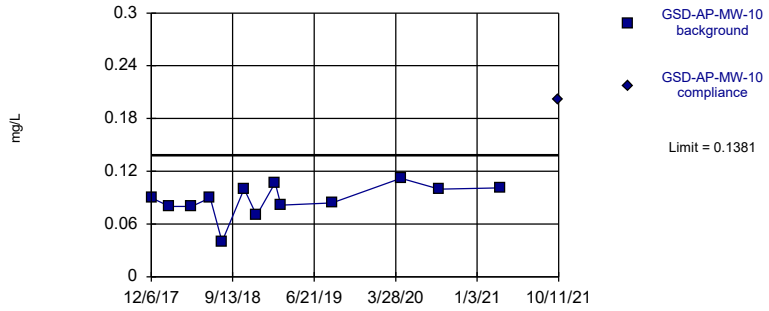
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.06075, Std. Dev.=0.02003, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8338, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Exceeds Limit

Prediction Limit

Intrawell Parametric



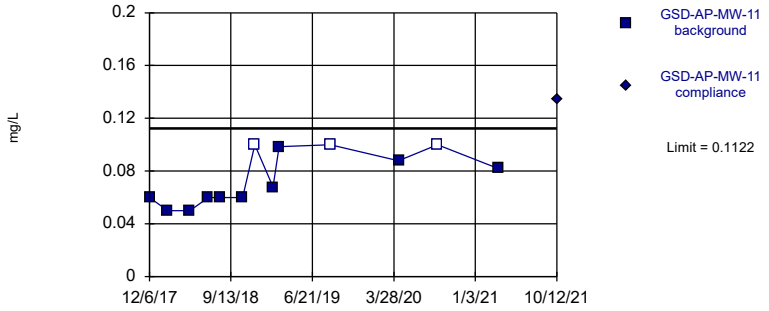
Background Data Summary: Mean=0.08731, Std. Dev.=0.01872, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9056, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Exceeds Limit

Prediction Limit

Intrawell Parametric



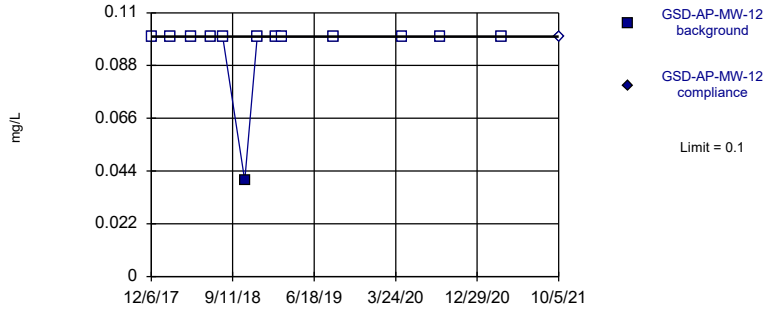
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0646, Std. Dev.=0.01756, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8429, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

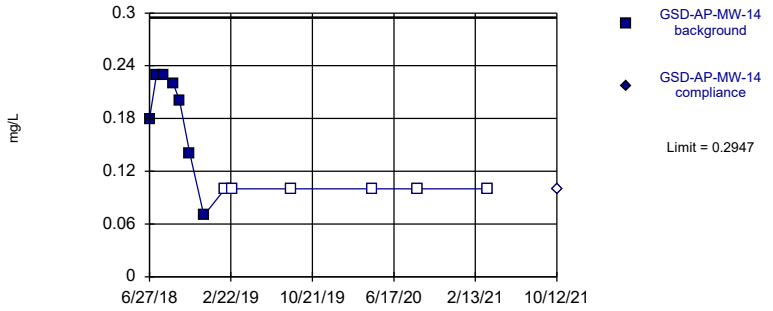
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1209, Std. Dev.=0.06411, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.821, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

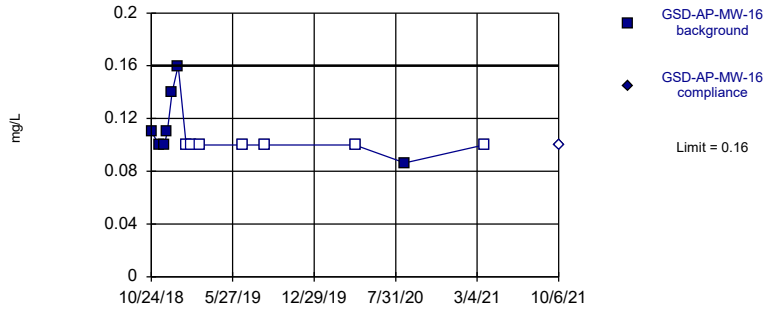
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 14 background values. 50% NDs. Well-constituent pair annual alpha = 0.01715. Individual comparison alpha = 0.008612 (1 of 2).

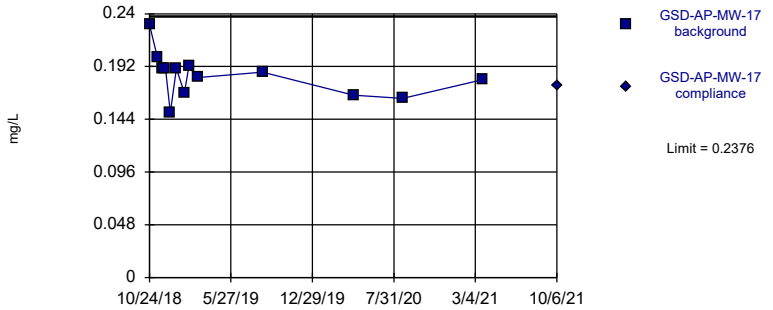
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1837, Std. Dev.=0.01989, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9377, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

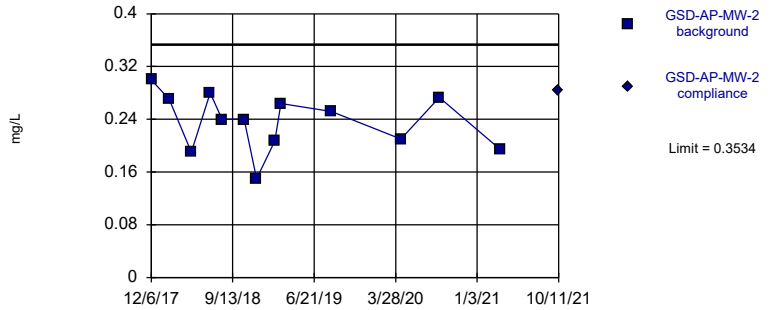
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2362, Std. Dev.=0.04323, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

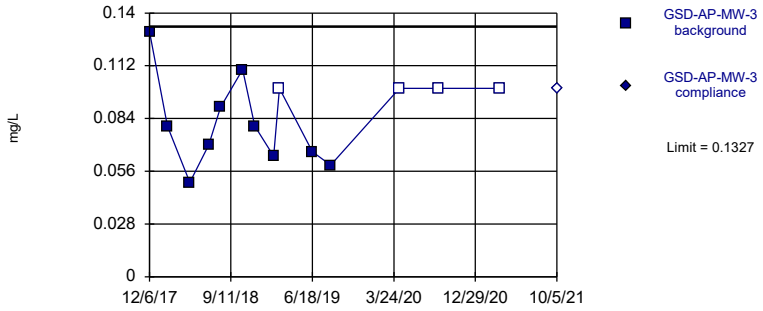
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.07516, Std. Dev.=0.0217, n=14, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9616, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

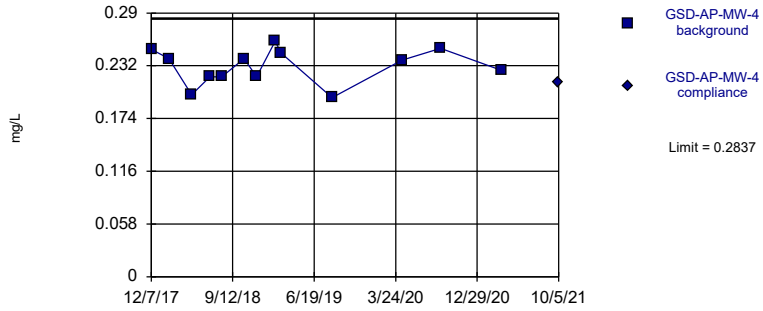
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2314, Std. Dev.=0.01931, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.937, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

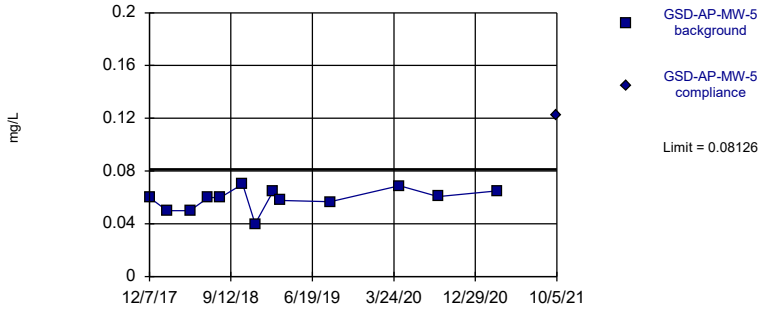
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Exceeds Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.05878, Std. Dev.=0.008293, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9302, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

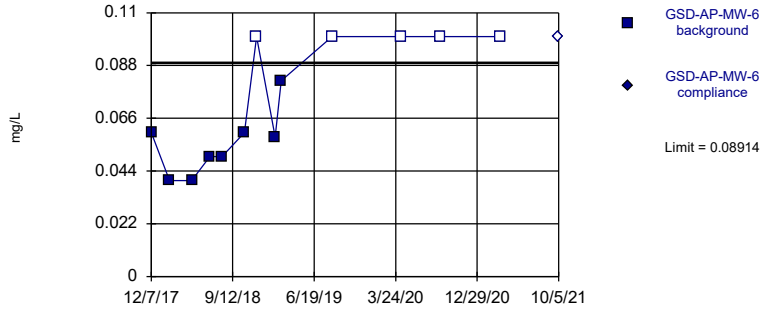
Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



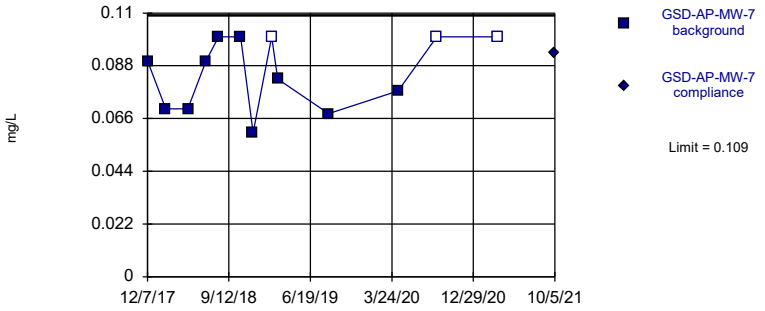
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.05192, Std. Dev.=0.01373, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8201, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



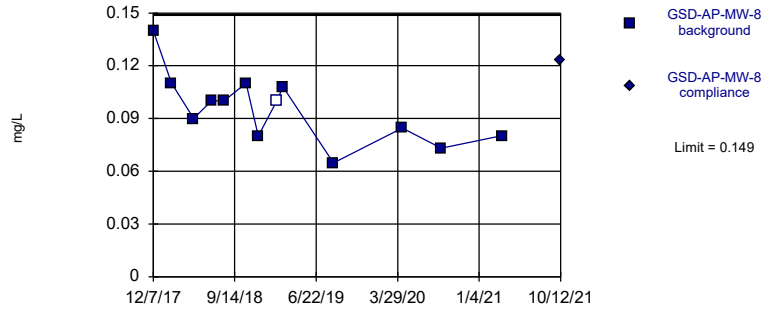
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0755, Std. Dev.=0.01236, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



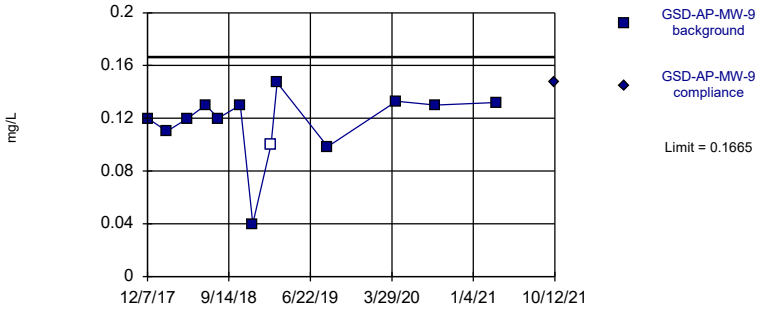
Background Data Summary: Mean=0.09544, Std. Dev.=0.01975, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9517, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



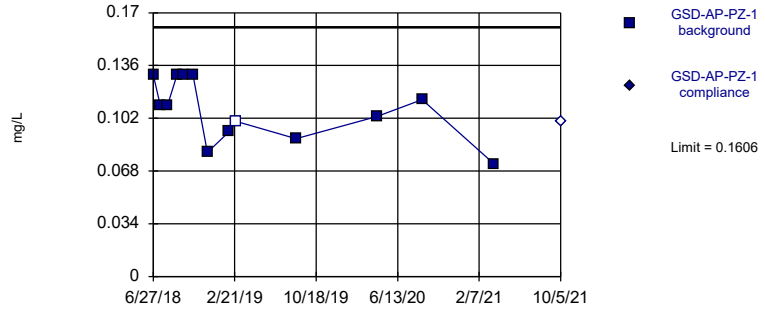
Background Data Summary (based on square transformation): Mean=0.01415, Std. Dev.=0.005005, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8951, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



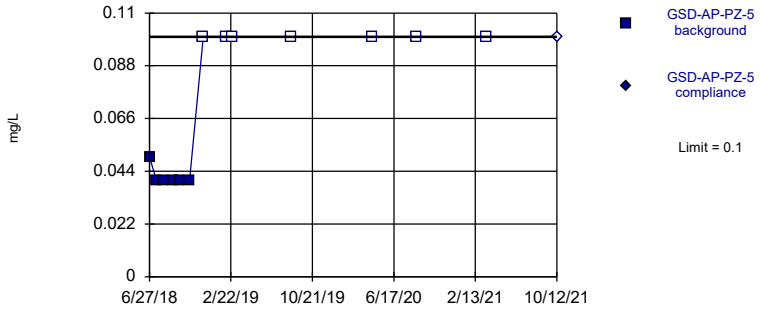
Background Data Summary: Mean=0.1071, Std. Dev.=0.01975, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9172, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



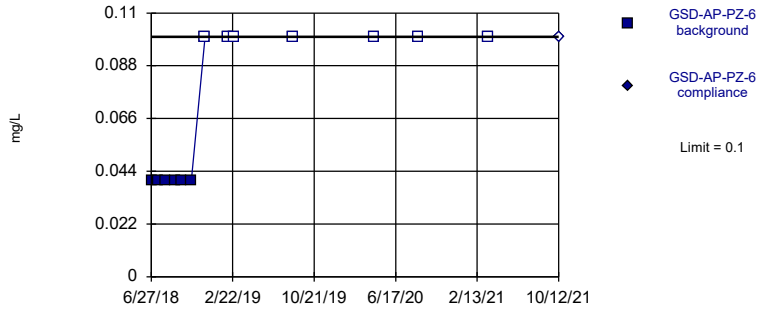
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



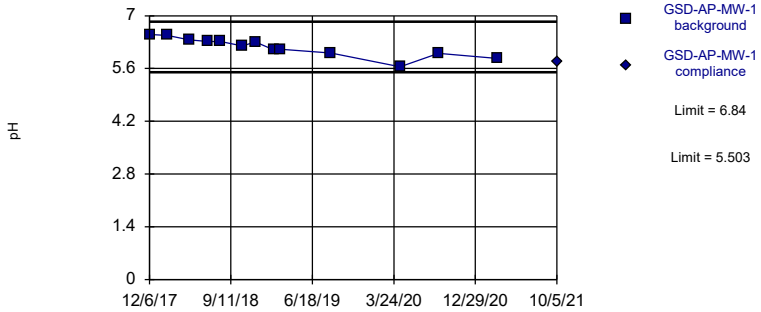
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Within Limits

Prediction Limit

Intrawell Parametric



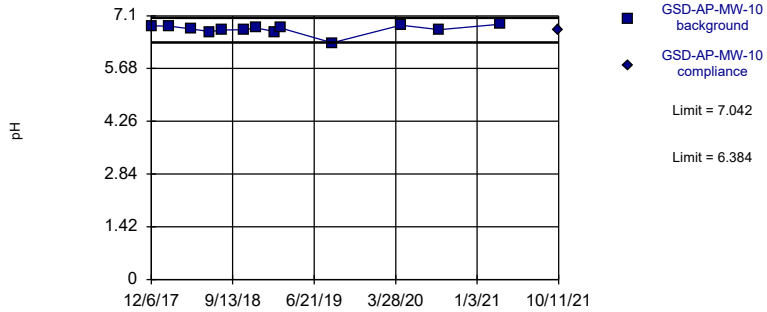
Background Data Summary: Mean=6.172, Std. Dev.=0.2466, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9507, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=2060, Std. Dev.=147.3, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8204, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

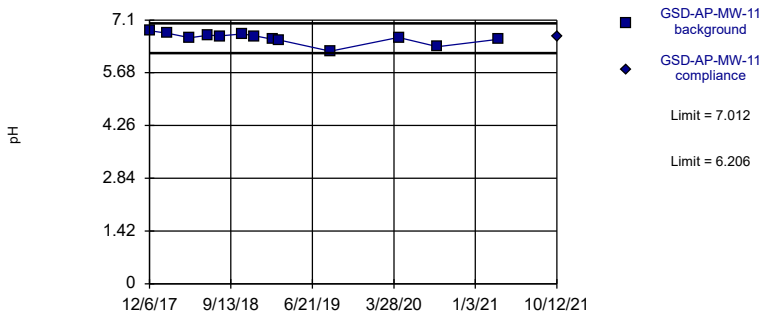
Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.609, Std. Dev.=0.1486, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

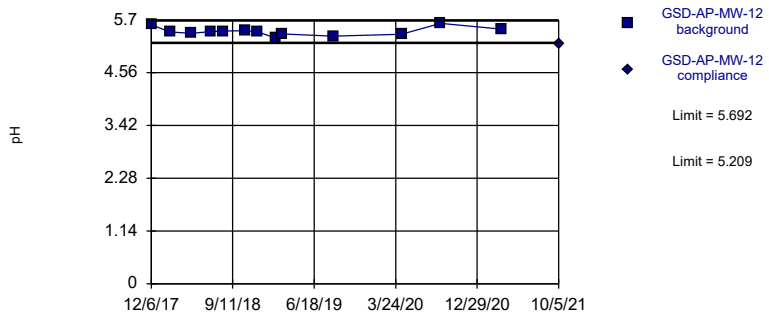
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.451, Std. Dev.=0.08911, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

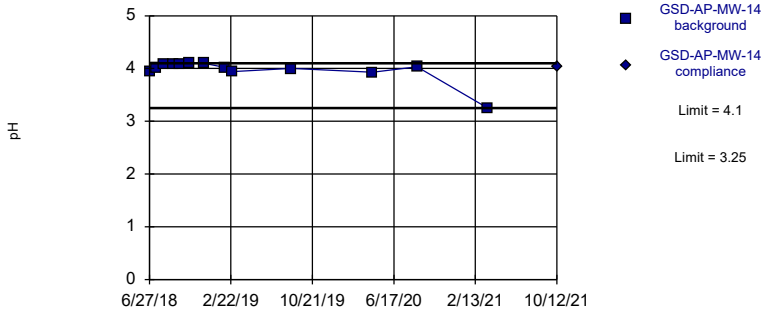
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

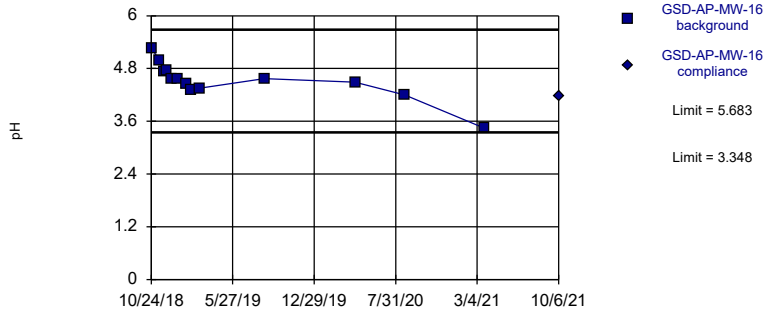
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.515, Std. Dev.=0.4307, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9225, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

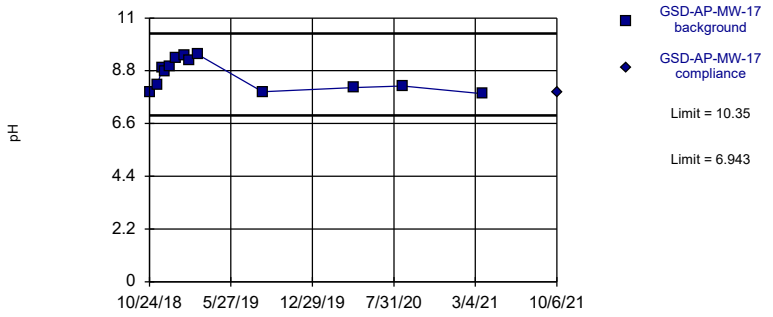
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.645, Std. Dev.=0.6277, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8772, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

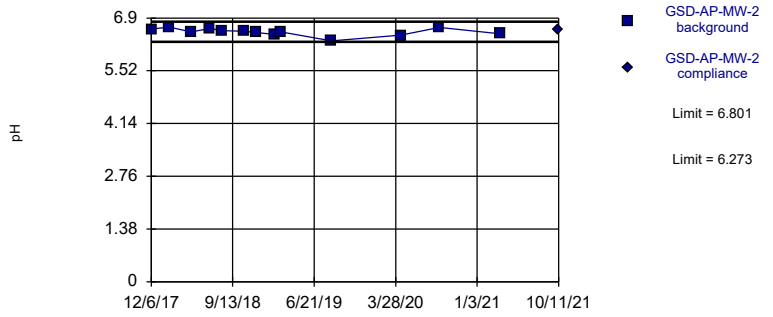
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.537, Std. Dev.=0.09742, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

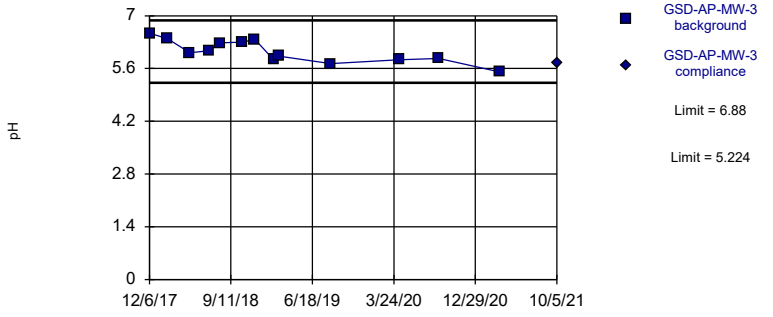
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.052, Std. Dev.=0.3053, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

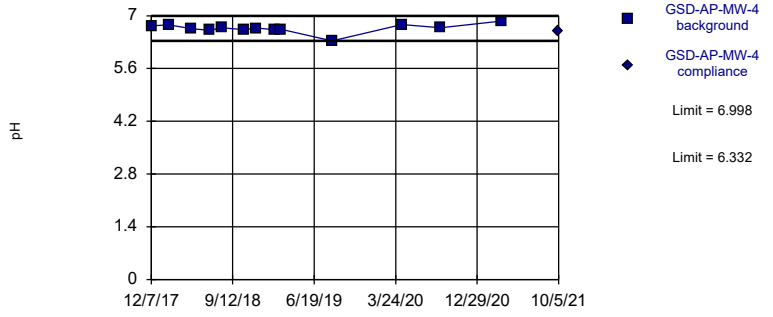
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.665, Std. Dev.=0.1229, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8446, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:20 PM View: Appendix III - Intrawell

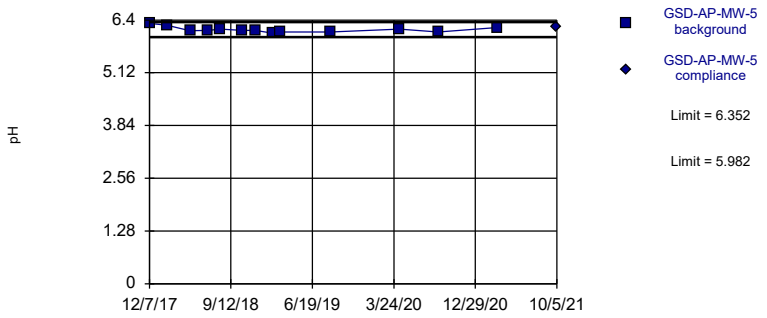
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.167, Std. Dev.=0.06836, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9003, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

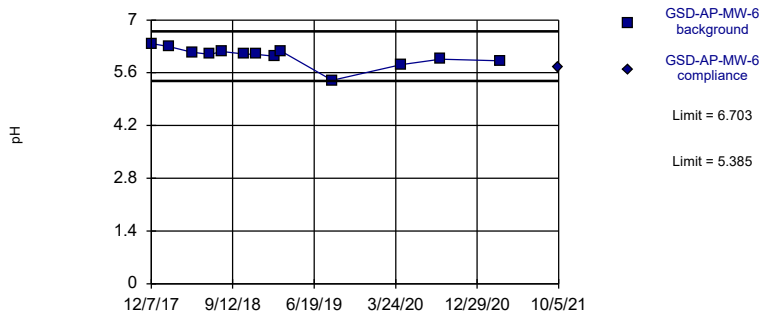
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.044, Std. Dev.=0.243, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8773, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

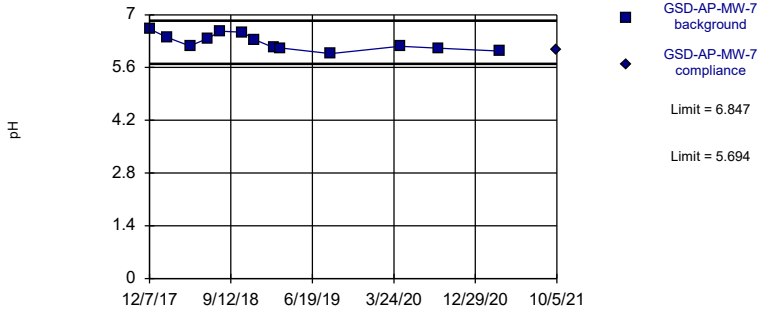
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.271, Std. Dev.=0.2126, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9235, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

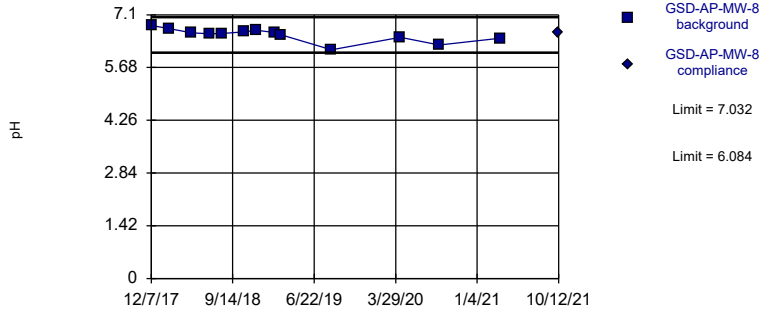
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.558, Std. Dev.=0.1748, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

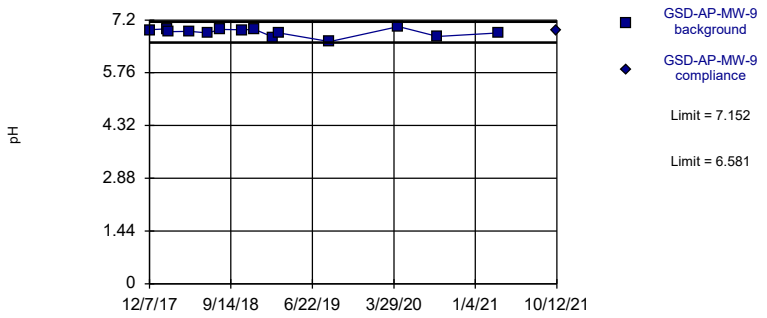
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.866, Std. Dev.=0.1077, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9109, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

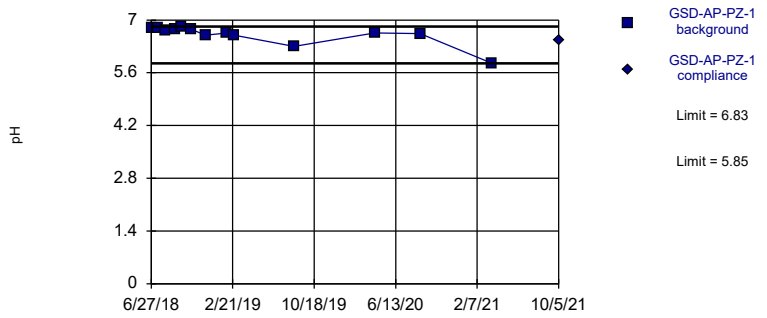
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

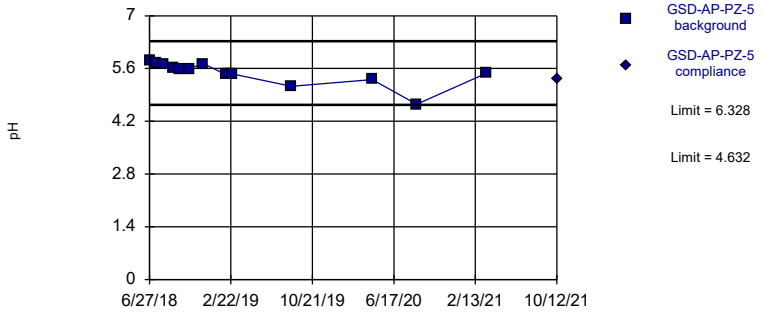
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.48, Std. Dev.=0.3127, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8416, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

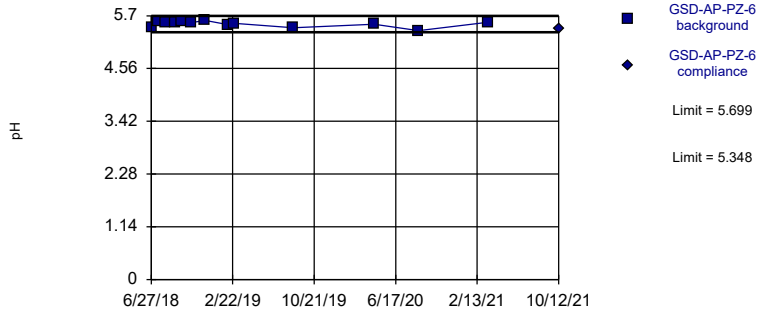
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.523, Std. Dev.=0.06473, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 1/13/2022 2:21 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	0.1	
2/6/2018	0.08 (J)	
4/23/2018	0.07 (J)	
6/26/2018	0.08 (J)	
8/7/2018	0.07 (J)	
10/22/2018	0.07 (J)	
12/4/2018	0.04 (J)	
2/5/2019	0.0525 (J)	
2/26/2019	<0.1	
8/21/2019	<0.1	
4/15/2020	<0.1	
8/25/2020	<0.1	
3/16/2021	<0.1	
10/5/2021		0.0601 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	0.09 (J)	
2/7/2018	0.08 (J)	
4/24/2018	0.08 (J)	
6/27/2018	0.09 (J)	
8/7/2018	0.04 (J)	
10/22/2018	0.1	
12/4/2018	0.07 (J)	
2/6/2019	0.107	
2/26/2019	0.0813 (J)	
8/22/2019	0.084 (J)	
4/15/2020	0.112	
8/26/2020	0.0997 (J)	
3/23/2021	0.101	
10/11/2021		0.201

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	0.06 (J)	
2/7/2018	0.05 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/8/2018	0.06 (J)	
10/23/2018	0.06 (J)	
12/4/2018	<0.1	
2/6/2019	0.0678 (J)	
2/27/2019	0.0985 (J)	
8/22/2019	<0.1	
4/14/2020	0.0878 (J)	
8/26/2020	<0.1	
3/23/2021	0.0819 (J)	
10/12/2021		0.134

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	<0.1	
2/8/2018	<0.1	
4/24/2018	<0.1	
6/27/2018	<0.1	
8/8/2018	<0.1	
10/23/2018	0.04 (J)	
12/5/2018	<0.1	
2/6/2019	<0.1	
2/27/2019	<0.1	
8/22/2019	<0.1	
4/14/2020	<0.1	
8/26/2020	<0.1	
3/23/2021	<0.1	
10/5/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	0.18	
7/18/2018	0.23	
8/6/2018	0.23	
9/5/2018	0.22	
9/24/2018	0.2	
10/24/2018	0.14	
12/5/2018	0.07 (J)	
2/5/2019	<0.1	
2/28/2019	<0.1	
8/20/2019	<0.1	
4/16/2020	<0.1	
8/25/2020	<0.1	
3/22/2021	<0.1	
10/12/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	0.11	
11/14/2018	0.1	
11/28/2018	0.1	
12/5/2018	0.11	
12/18/2018	0.14	
1/3/2019	0.16	
1/24/2019	<0.1	
2/5/2019	<0.1	
2/28/2019	<0.1	
6/24/2019	<0.1 (D)	
8/19/2019	<0.1	
4/15/2020	<0.1	
8/25/2020	0.0863 (J)	
3/22/2021	<0.1	
10/6/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	0.23	
11/14/2018	0.2	
11/28/2018	0.19	
12/5/2018	0.19	
12/18/2018	0.15	
1/3/2019	0.19	
1/24/2019	0.168	
2/5/2019	0.192	
2/28/2019	0.182	
8/19/2019	0.187	
4/16/2020	0.166	
8/24/2020	0.163	
3/22/2021	0.18	
10/6/2021		0.175

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	0.3	
2/6/2018	0.27	
4/23/2018	0.19	
6/27/2018	0.28	
8/7/2018	0.24	
10/22/2018	0.24	
12/4/2018	0.15	
2/5/2019	0.207	
2/26/2019	0.264	
8/20/2019	0.252	
4/15/2020	0.21	
8/25/2020	0.273	
3/24/2021	0.194	
10/11/2021		0.283

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	0.13	
2/6/2018	0.08 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.07 (J)	
8/7/2018	0.09 (J)	
10/22/2018	0.11	
12/3/2018	0.08 (J)	
2/5/2019	0.064 (J)	
2/25/2019	<0.1	
6/18/2019	0.0664 (J)	
8/20/2019	0.0592 (J)	
4/13/2020	<0.1	
8/26/2020	<0.1	
3/22/2021	<0.1	
10/5/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	0.25	
2/6/2018	0.24	
4/24/2018	0.2	
6/26/2018	0.22	
8/6/2018	0.22	
10/22/2018	0.24	
12/3/2018	0.22	
2/5/2019	0.259	
2/26/2019	0.246	
8/20/2019	0.197	
4/15/2020	0.238	
8/26/2020	0.251	
3/24/2021	0.227	
10/5/2021		0.214

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	0.06 (J)	
2/6/2018	0.05 (J)	
4/25/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/7/2018	0.06 (J)	
10/23/2018	0.07 (J)	
12/5/2018	0.04 (J)	
2/5/2019	0.0651 (J)	
2/27/2019	0.0578 (J)	
8/20/2019	0.0567 (J)	
4/13/2020	0.0688 (J)	
8/24/2020	0.0607 (J)	
3/16/2021	0.065 (J)	
10/5/2021		0.122

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	0.06 (J)	
2/8/2018	0.04 (J)	
4/25/2018	0.04 (J)	
6/26/2018	0.05 (J)	
8/7/2018	0.05 (J)	
10/23/2018	0.06 (J)	
12/3/2018	<0.1	
2/5/2019	0.0581 (J)	
2/26/2019	0.0816 (J)	
8/20/2019	<0.1	
4/13/2020	<0.1	
8/26/2020	<0.1	
3/17/2021	<0.1	
10/5/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	0.09 (J)	
2/8/2018	0.07 (J)	
4/25/2018	0.07 (J)	
6/26/2018	0.09 (J)	
8/8/2018	0.1	
10/23/2018	0.1	
12/4/2018	0.06 (J)	
2/6/2019	<0.1	
2/27/2019	0.0824 (J)	
8/21/2019	0.068 (J)	
4/15/2020	0.0775 (J)	
8/26/2020	<0.1	
3/23/2021	<0.1	
10/5/2021		0.0933 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	0.14	
2/8/2018	0.11	
4/25/2018	0.09 (J)	
6/26/2018	0.1	
8/8/2018	0.1	
10/23/2018	0.11	
12/4/2018	0.08 (J)	
2/6/2019	<0.1	
2/27/2019	0.108	
8/21/2019	0.0648 (J)	
4/14/2020	0.0845 (J)	
8/26/2020	0.0732 (J)	
3/23/2021	0.0802 (J)	
10/12/2021		0.123

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	0.12	
2/12/2018	0.11	
4/25/2018	0.12	
6/26/2018	0.13	
8/8/2018	0.12	
10/23/2018	0.13	
12/5/2018	0.04 (J)	
2/6/2019	<0.1	
2/27/2019	0.147	
8/21/2019	0.0984 (J)	
4/14/2020	0.133	
8/26/2020	0.13	
3/23/2021	0.132	
10/12/2021		0.147

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	0.13	
7/18/2018	0.11	
8/7/2018	0.11	
9/5/2018	0.13	
9/24/2018	0.13	
10/22/2018	0.13	
12/3/2018	0.08 (J)	
2/5/2019	0.0934 (J)	
2/25/2019	<0.1	
8/20/2019	0.0889 (J)	
4/13/2020	0.103	
8/24/2020	0.114	
3/24/2021	0.0725 (J)	
10/5/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	0.05 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.1	
2/7/2019	<0.1	
2/25/2019	<0.1	
8/21/2019	<0.1	
4/15/2020	<0.1	
8/24/2020	<0.1	
3/16/2021	<0.1	
10/12/2021		<0.1

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	0.04 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.1	
2/7/2019	<0.1	
2/25/2019	<0.1	
8/21/2019	<0.1	
4/15/2020	<0.1	
8/24/2020	<0.1	
3/16/2021	<0.1	
10/12/2021		<0.1

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	6.5	
2/6/2018	6.48	
4/23/2018	6.36	
6/26/2018	6.32	
8/7/2018	6.32	
10/22/2018	6.2	
12/4/2018	6.31	
2/5/2019	6.1	
2/26/2019	6.11	
8/21/2019	6.01	
4/15/2020	5.65	
8/25/2020	6	
3/16/2021	5.87	
10/5/2021		5.79

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	6.83	
2/7/2018	6.82	
4/24/2018	6.74	
6/27/2018	6.67	
8/7/2018	6.72	
10/22/2018	6.73	
12/4/2018	6.77	
2/6/2019	6.67	
2/26/2019	6.77	
8/22/2019	6.37	
4/15/2020	6.85	
8/26/2020	6.73	
3/23/2021	6.87	
10/11/2021		6.72

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	6.81	
2/7/2018	6.74	
4/24/2018	6.62	
6/27/2018	6.69	
8/8/2018	6.67	
10/23/2018	6.73	
12/4/2018	6.67	
2/6/2019	6.58	
2/27/2019	6.56	
8/22/2019	6.26	
4/14/2020	6.63	
8/26/2020	6.38	
3/23/2021	6.58	
10/12/2021		6.66

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	5.6	
2/8/2018	5.44	
4/24/2018	5.41	
6/27/2018	5.45	
8/8/2018	5.46	
10/23/2018	5.47	
12/5/2018	5.45	
2/6/2019	5.31	
2/27/2019	5.4	
8/22/2019	5.35	
4/14/2020	5.39	
8/26/2020	5.63	
3/23/2021	5.5	
10/5/2021		5.19

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	3.95	
7/18/2018	4.02	
8/6/2018	4.07	
9/5/2018	4.07	
9/24/2018	4.07	
10/24/2018	4.1	
12/5/2018	4.1	
2/5/2019	4.02	
2/28/2019	3.94 (E)	
8/20/2019	4	
4/16/2020	3.93	
8/25/2020	4.03	
3/22/2021	3.25	
10/12/2021		4.04

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	5.27	
11/14/2018	4.99	
11/28/2018	4.74	
12/5/2018	4.76	
12/18/2018	4.57	
1/3/2019	4.56	
1/24/2019	4.45	
2/5/2019	4.3	
2/28/2019	4.35	
8/19/2019	4.57	
4/15/2020	4.49	
8/25/2020	4.2	
3/22/2021	3.45	
10/6/2021		4.16

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	7.92	
11/14/2018	8.23	
11/28/2018	8.95	
12/5/2018	8.77	
12/18/2018	8.99	
1/3/2019	9.35	
1/24/2019	9.42	
2/5/2019	9.23	
2/28/2019	9.48	
8/19/2019	7.93	
4/16/2020	8.1	
8/24/2020	8.17	
3/22/2021	7.85	
10/6/2021		7.92

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	6.61	
2/6/2018	6.66	
4/23/2018	6.54	
6/27/2018	6.63	
8/7/2018	6.57	
10/22/2018	6.55	
12/4/2018	6.52	
2/5/2019	6.47	
2/26/2019	6.54	
8/20/2019	6.3	
4/15/2020	6.45	
8/25/2020	6.65	
3/24/2021	6.49	
10/11/2021		6.59

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	6.54	
2/6/2018	6.39	
4/24/2018	6.02	
6/27/2018	6.07	
8/7/2018	6.28	
10/22/2018	6.3	
12/3/2018	6.38	
2/5/2019	5.83	
2/25/2019	5.93	
8/20/2019	5.73	
4/13/2020	5.83	
8/26/2020	5.87	
3/22/2021	5.51	
10/5/2021		5.76

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	6.73	
2/6/2018	6.76	
4/24/2018	6.66	
6/26/2018	6.61	
8/6/2018	6.68	
10/22/2018	6.63	
12/3/2018	6.67	
2/5/2019	6.63	
2/26/2019	6.64	
8/20/2019	6.33	
4/15/2020	6.77	
8/26/2020	6.68	
3/24/2021	6.86	
10/5/2021		6.58

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	6.32	
2/6/2018	6.27	
4/25/2018	6.14	
6/27/2018	6.15	
8/7/2018	6.18	
10/23/2018	6.15	
12/5/2018	6.15	
2/5/2019	6.08	
2/27/2019	6.11	
8/20/2019	6.11	
4/13/2020	6.18	
8/24/2020	6.11	
3/16/2021	6.22	
10/5/2021		6.24

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	6.38	
2/8/2018	6.29	
4/25/2018	6.15	
6/26/2018	6.09	
8/7/2018	6.16	
10/23/2018	6.1	
12/3/2018	6.09	
2/5/2019	6.04	
2/26/2019	6.17	
8/20/2019	5.4	
4/13/2020	5.82	
8/26/2020	5.96	
3/17/2021	5.92	
10/5/2021		5.74

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	6.62	
2/8/2018	6.39	
4/25/2018	6.17	
6/26/2018	6.38	
8/8/2018	6.56	
10/23/2018	6.54	
12/4/2018	6.33	
2/6/2019	6.13	
2/27/2019	6.12	
8/21/2019	5.97	
4/15/2020	6.16	
8/26/2020	6.11	
3/23/2021	6.04	
10/5/2021		6.06

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	6.81	
2/8/2018	6.73	
4/25/2018	6.61	
6/26/2018	6.59	
8/8/2018	6.6	
10/23/2018	6.64	
12/4/2018	6.68	
2/6/2019	6.62	
2/27/2019	6.56	
8/21/2019	6.16	
4/14/2020	6.49	
8/26/2020	6.29	
3/23/2021	6.47	
10/12/2021		6.61

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	6.93	
2/8/2018	6.96	
2/12/2018	6.88	
4/25/2018	6.89	
6/26/2018	6.85	
8/8/2018	6.94	
10/23/2018	6.93	
12/5/2018	6.94	
2/6/2019	6.73	
2/27/2019	6.85	
8/21/2019	6.61	
4/14/2020	7.02	
8/26/2020	6.75	
3/23/2021	6.85	
10/12/2021		6.9

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	6.79	
7/18/2018	6.8	
8/7/2018	6.73	
9/5/2018	6.75	
9/24/2018	6.83	
10/22/2018	6.76	
12/3/2018	6.6	
2/5/2019	6.66	
2/25/2019	6.6	
8/20/2019	6.3	
4/13/2020	6.66	
8/24/2020	6.64	
3/24/2021	5.85	
10/5/2021		6.46

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	5.81	
7/18/2018	5.74	
8/8/2018	5.7	
9/5/2018	5.61	
9/24/2018	5.59	
10/23/2018	5.6	
12/3/2018	5.73	
2/7/2019	5.44	
2/25/2019	5.46	
8/21/2019	5.13	
4/15/2020	5.31	
8/24/2020	4.65	
3/16/2021	5.47	
10/12/2021		5.33

Prediction Limit

Constituent: pH (pH) Analysis Run 1/13/2022 2:23 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	5.44	
7/18/2018	5.58	
8/8/2018	5.55	
9/5/2018	5.56	
9/24/2018	5.57	
10/23/2018	5.55	
12/3/2018	5.6	
2/7/2019	5.51	
2/25/2019	5.54	
8/21/2019	5.44	
4/15/2020	5.52	
8/24/2020	5.38	
3/16/2021	5.56	
10/12/2021		5.41

FIGURE G.

FIGURE H.

Appendix III - Prediction Limit Exceedances Trend Test - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06242**	**-61**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-3**	**0.05252**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.056**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.069**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-18.36**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-11**	**4.022**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-2**	**-14.19**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-11.11**	**-67**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.7197**	**-92**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.01846**	**57**	**48**	**Yes**	**14**	**21.43**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.5008**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-81.47**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**22.44**	**49**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**-63.87**	**-63**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-43.33**	**-73**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Prediction Limit Exceedances Trend Test - All Results

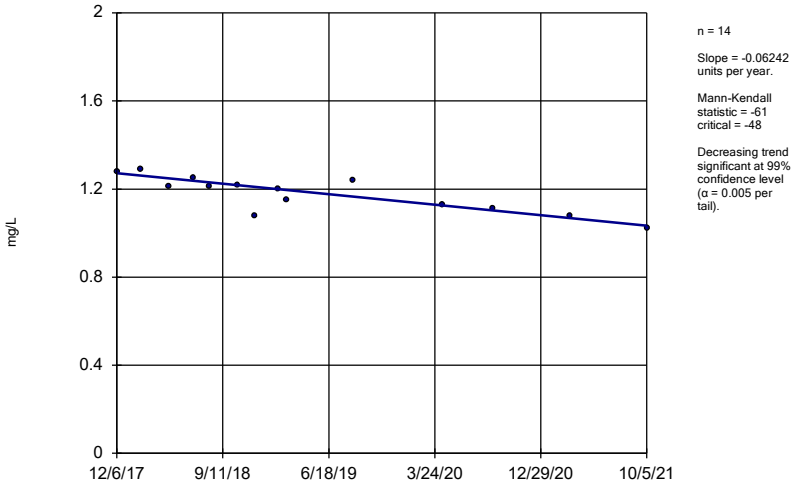
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:06 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06242**	**-61**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-11	0.01128	44	48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	48	No	14	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.02049	44	53	No	15	60	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.001687	-35	-48	No	14	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-64**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-3**	**0.05252**	**59**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.056**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.069**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-18.36**	**-55**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	0.3552	11	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**4.022**	**52**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	2.155	15	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-1.044	-16	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.5887	-13	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.622	25	48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-14.19**	**-52**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-11.11**	**-67**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-5	-2.198	-33	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	-0.8321	-11	-48	No	14	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.7715	11	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	-0.02609	-6	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	0.02804	3	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	-0.05489	-6	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	0.06337	13	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.02255	13	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.04562	-7	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.412**	**-67**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.7197**	**-92**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	0.183	23	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.3869	-44	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-6	-0.2376	-40	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-7	-0.5316	-44	-48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.1905	26	48	No	14	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.2026	27	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-10	0.01072	41	48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	**GSD-AP-MW-11**	**0.01846**	**57**	**48**	**Yes**	**14**	**21.43**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride (mg/L)	GSD-AP-MW-14 (bg)	-0.04431	-47	-48	No	14	50	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-16 (bg)	0	-33	-53	No	15	53.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-17 (bg)	-0.009217	-44	-48	No	14	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GSD-AP-MW-5	0.004584	33	48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-12	-0.04154	-18	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-14 (bg)	-0.01834	-18	-48	No	14	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.5008**	**-70**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.09143	-10	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-1	-1.272	-2	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-4.795	-10	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	29.67	42	53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-1.162	-42	-48	No	14	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-3	0.8391	4	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-81.47**	**-68**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**22.44**	**49**	**48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	0	0	48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-10.61	-11	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	26.27	37	53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-3.097	-18	-48	No	14	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-2**	**-63.87**	**-63**	**-48**	**Yes**	**14**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-43.33**	**-73**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 14

Slope = -0.06242 units per year.

Mann-Kendall statistic = -61
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

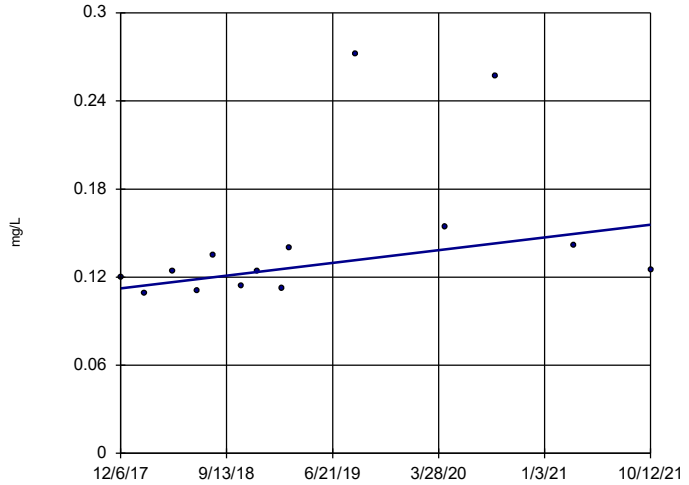
Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 14

Slope = 0.01128 units per year.

Mann-Kendall statistic = 44
critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

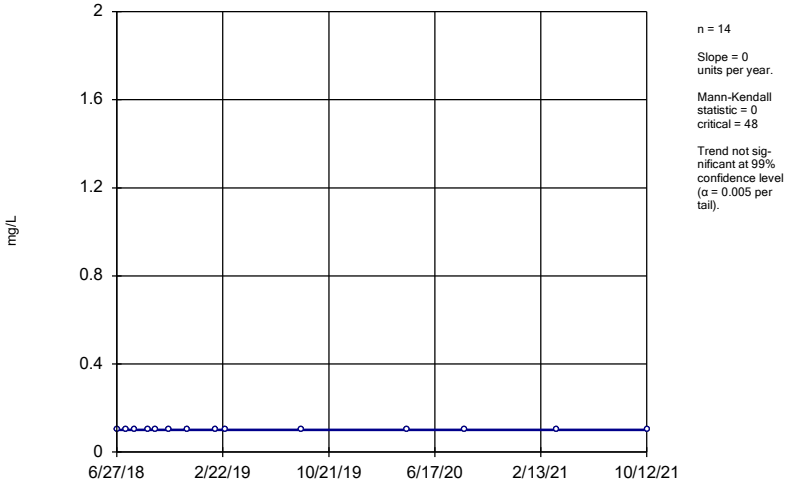
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 0
critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

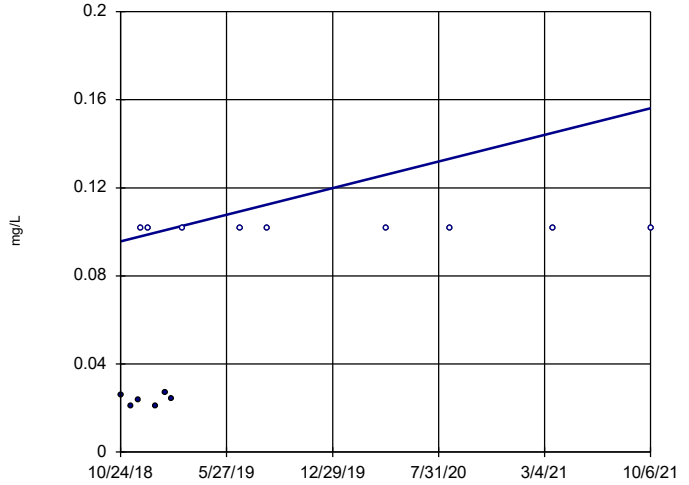
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 0.02049 units per year.

Mann-Kendall statistic = 44
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

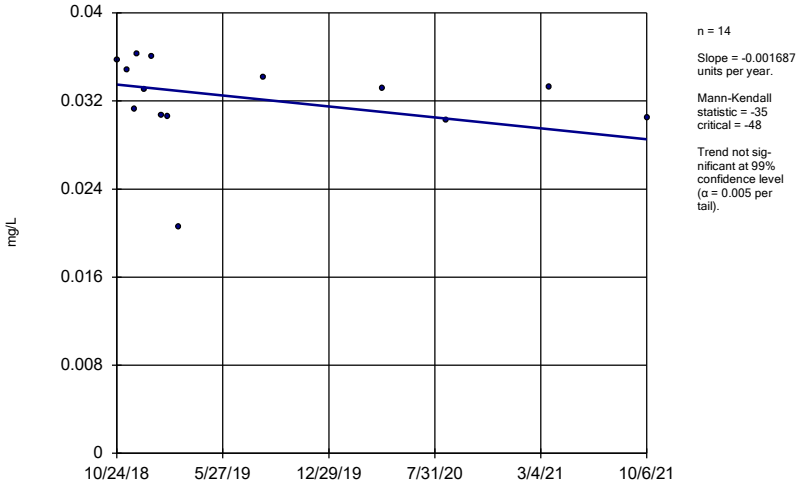
Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -0.001687 units per year.

Mann-Kendall statistic = -35
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

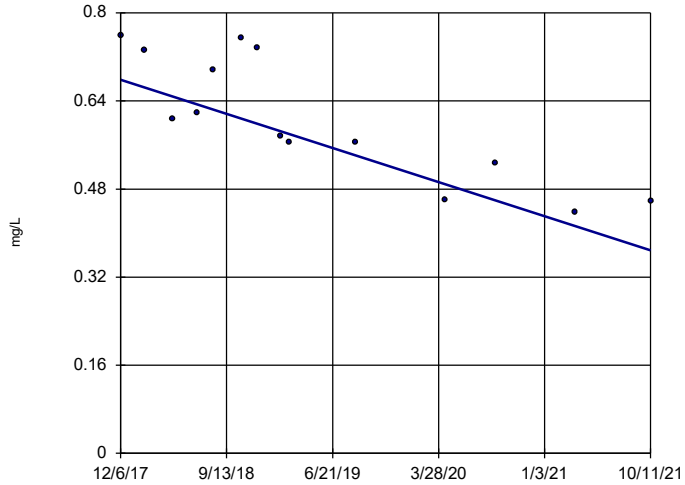
Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 14

Slope = -0.08037 units per year.

Mann-Kendall statistic = -64
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

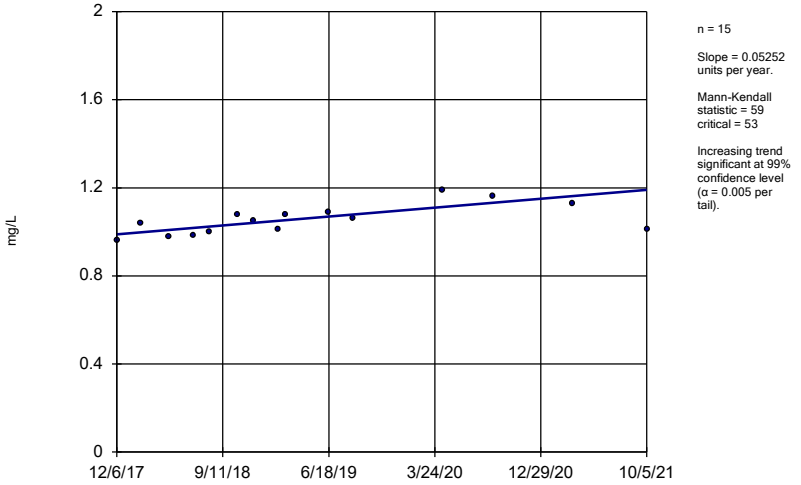
Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 15

Slope = 0.05252 units per year.

Mann-Kendall statistic = 59
critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

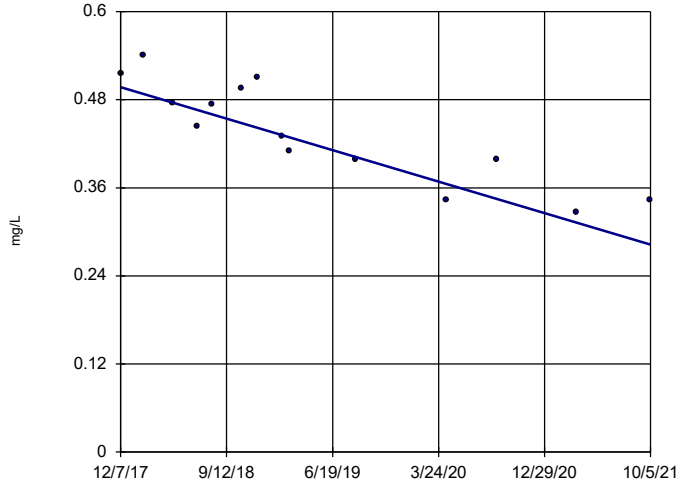
Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 14

Slope = -0.056 units per year.

Mann-Kendall statistic = -68
critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

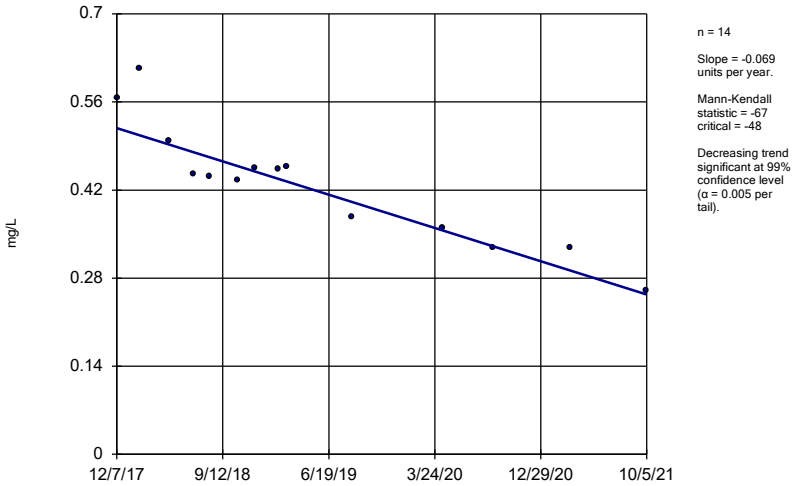
Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 14

Slope = -0.069 units per year.

Mann-Kendall statistic = -67
critical = -48

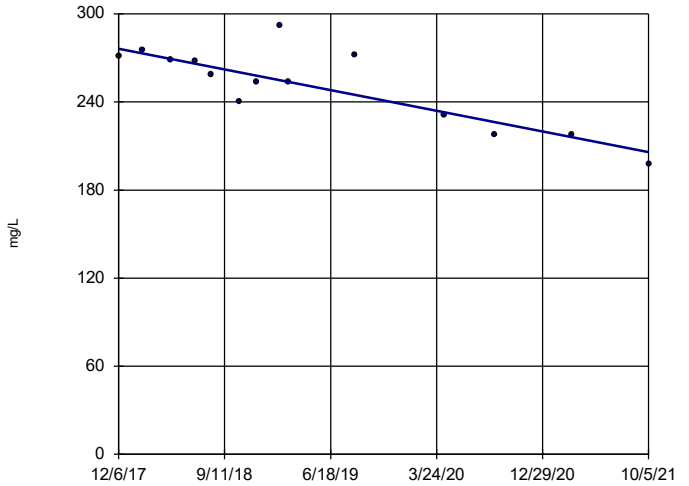
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 14

Slope = -18.36 units per year.

Mann-Kendall statistic = -55
critical = -48

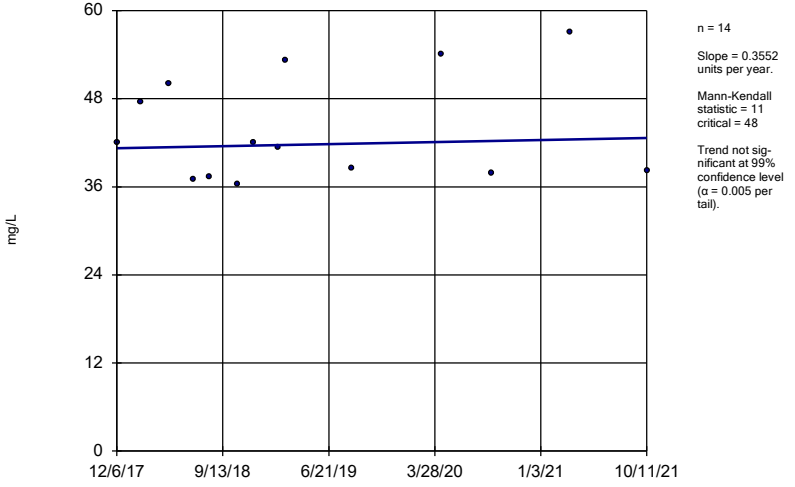
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 14

Slope = 0.3552 units per year.

Mann-Kendall statistic = 11
critical = 48

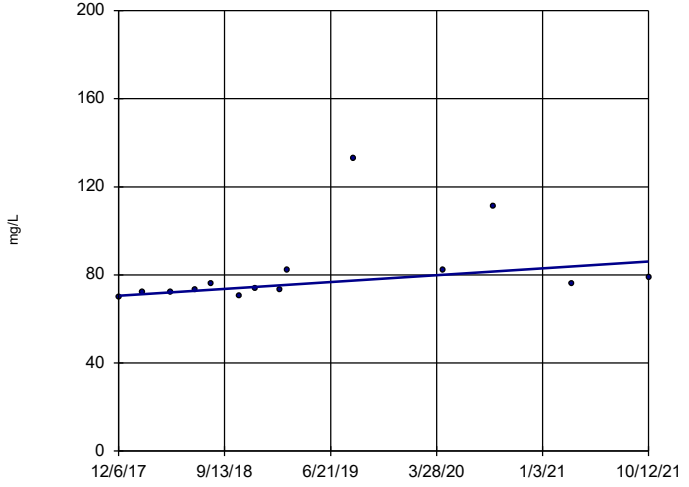
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 14

Slope = 4.022 units per year.

Mann-Kendall statistic = 52
critical = 48

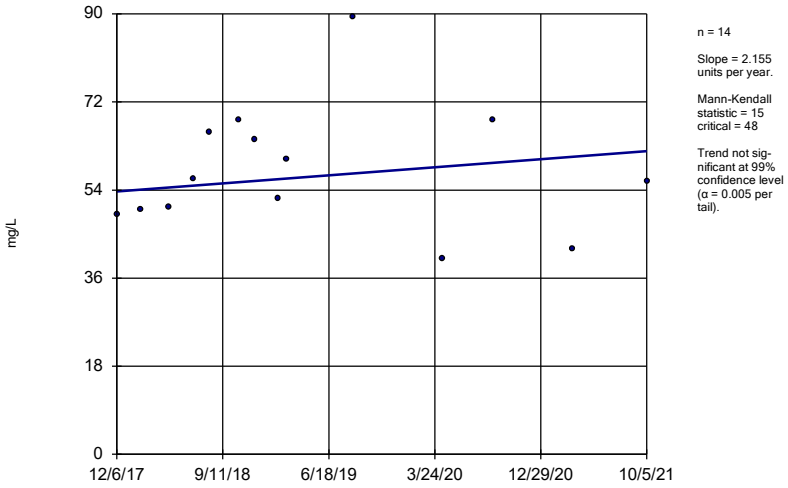
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 14

Slope = 2.155 units per year.

Mann-Kendall statistic = 15 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

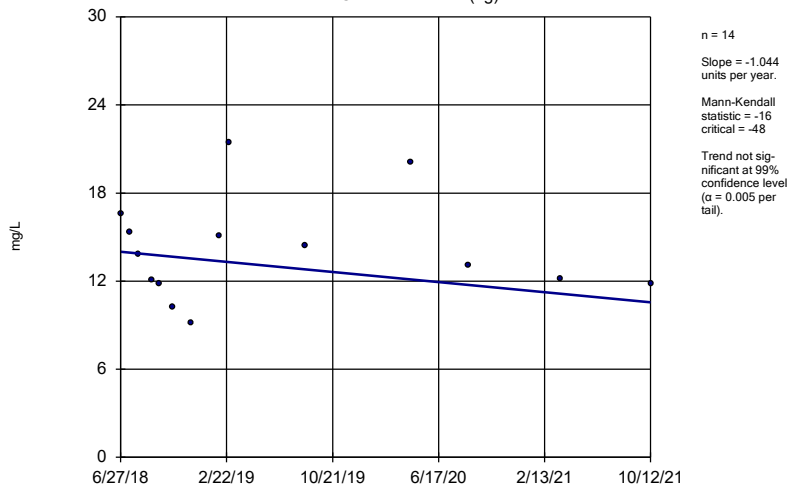
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -1.044 units per year.

Mann-Kendall statistic = -16 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

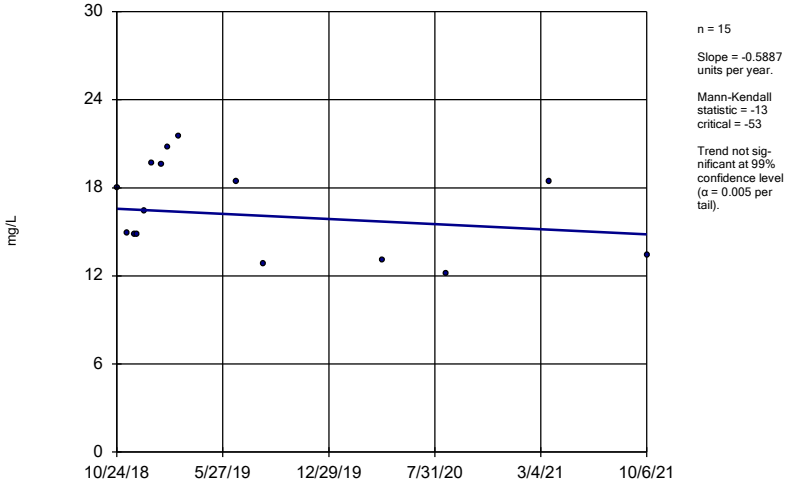
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = -0.5887 units per year.

Mann-Kendall statistic = -13 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

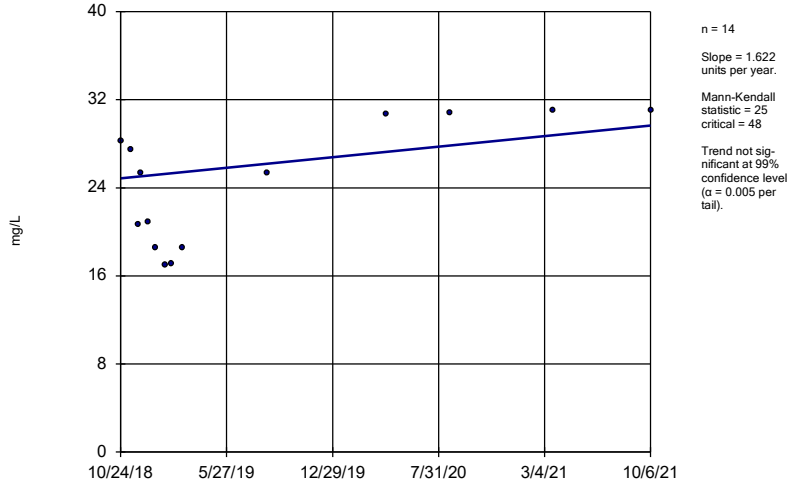
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = 1.622 units per year.

Mann-Kendall statistic = 25 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

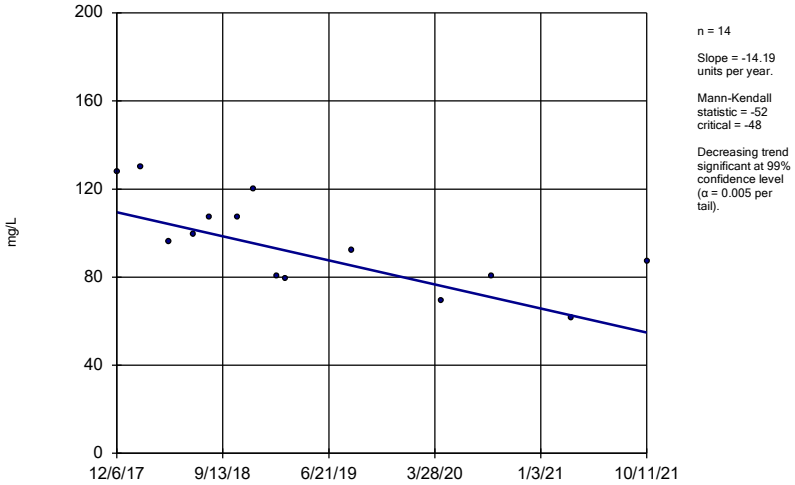
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 14

Slope = -14.19 units per year.

Mann-Kendall statistic = -52 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

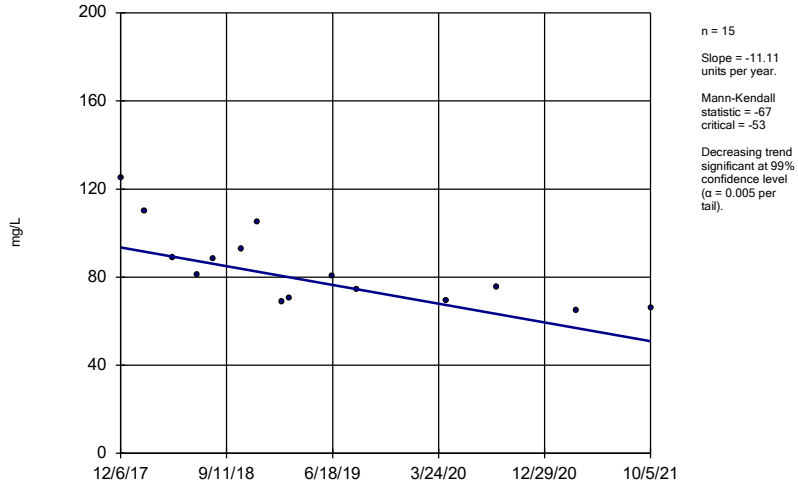
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 15

Slope = -11.11 units per year.

Mann-Kendall statistic = -67 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

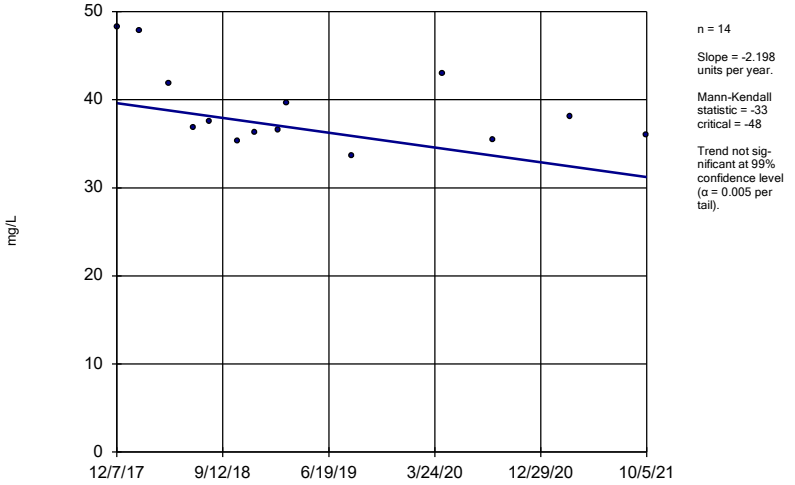
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 14

Slope = -2.198 units per year.

Mann-Kendall statistic = -33 critical = -48

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

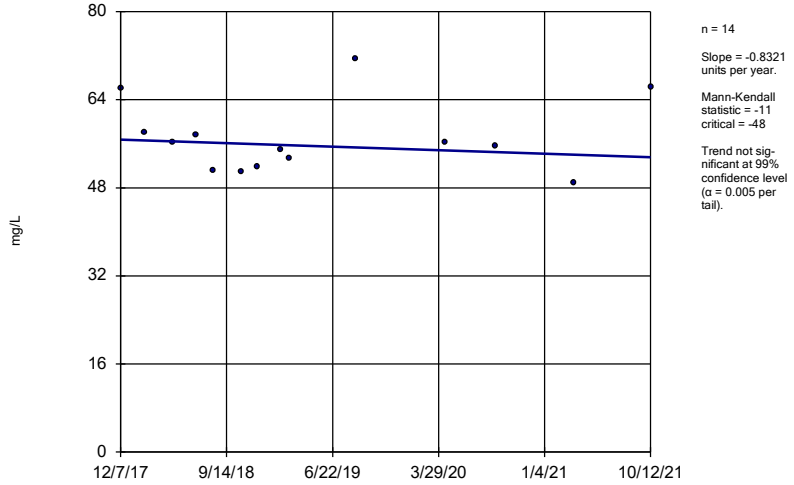
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-8



n = 14

Slope = -0.8321 units per year.

Mann-Kendall statistic = -11 critical = -48

Trend not sig-nificant at 99% confidence level (α = 0.005 per tail).

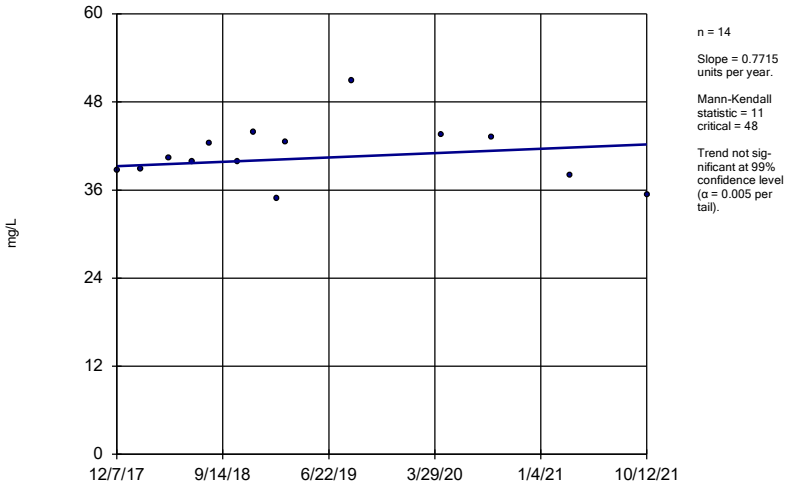
Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 14

Slope = 0.7715 units per year.

Mann-Kendall statistic = 11
critical = 48

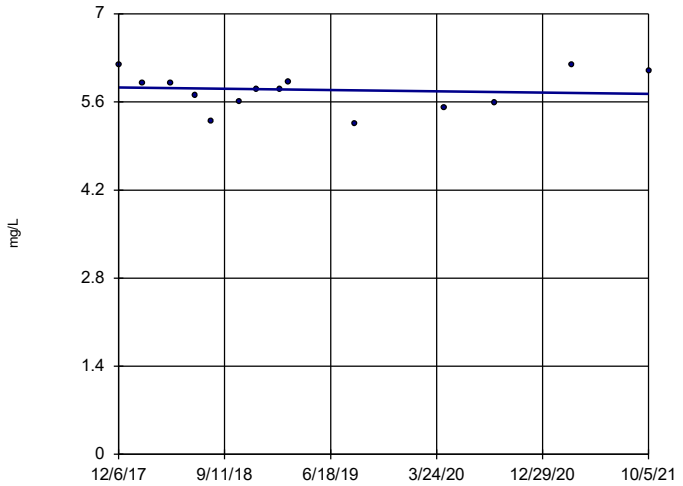
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 14

Slope = -0.02609 units per year.

Mann-Kendall statistic = -6
critical = -48

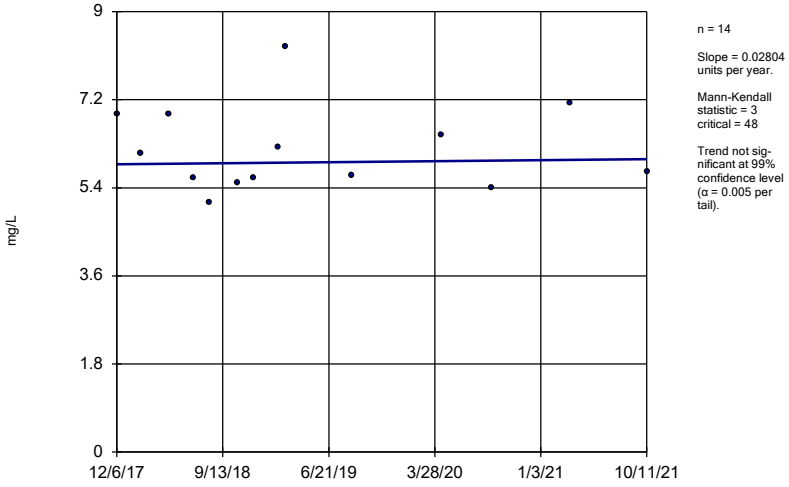
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 14

Slope = 0.02804 units per year.

Mann-Kendall statistic = 3
critical = 48

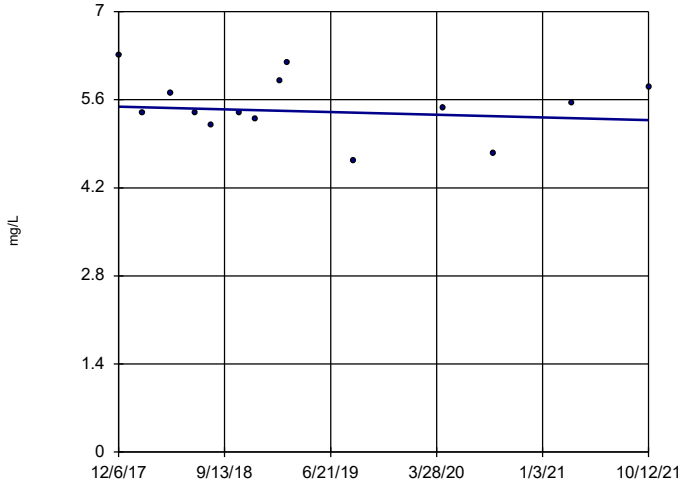
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 14

Slope = -0.05489 units per year.

Mann-Kendall statistic = -6
critical = -48

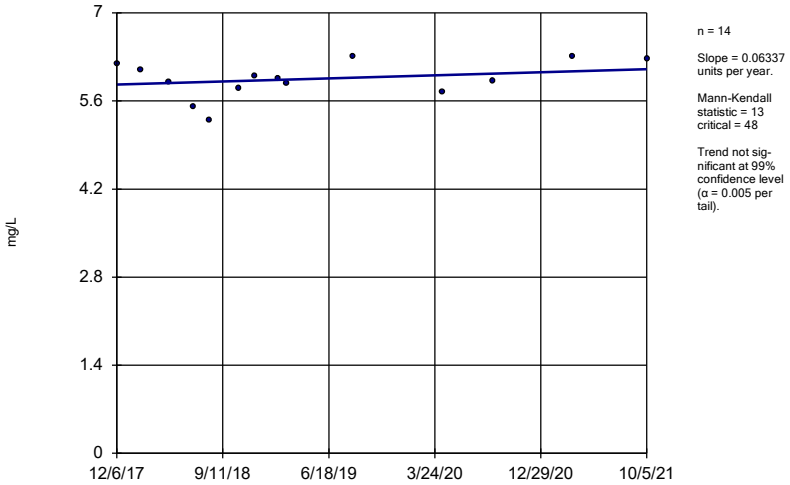
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 14

Slope = 0.06337 units per year.

Mann-Kendall statistic = 13 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

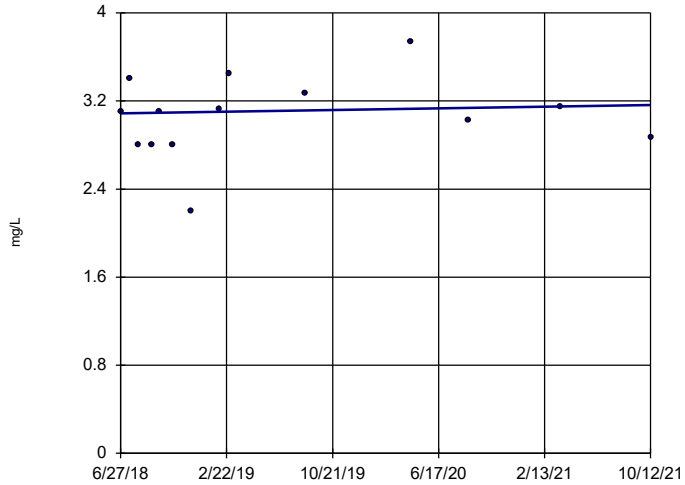
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = 0.02255 units per year.

Mann-Kendall statistic = 13 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

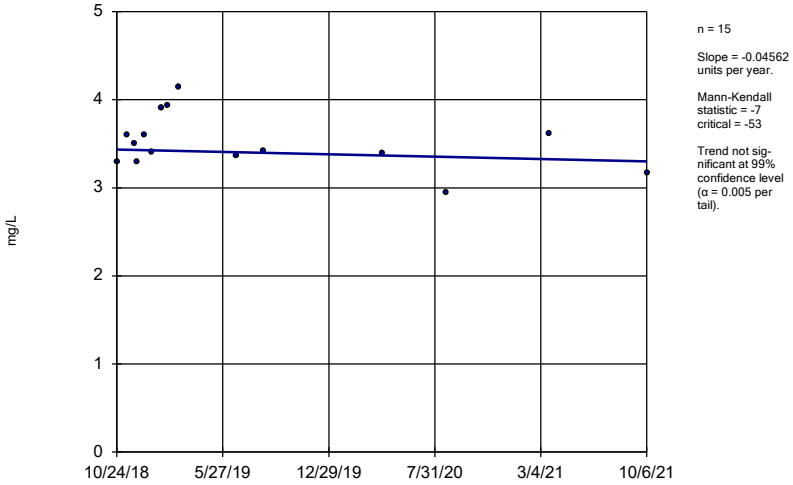
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = -0.04562 units per year.

Mann-Kendall statistic = -7 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

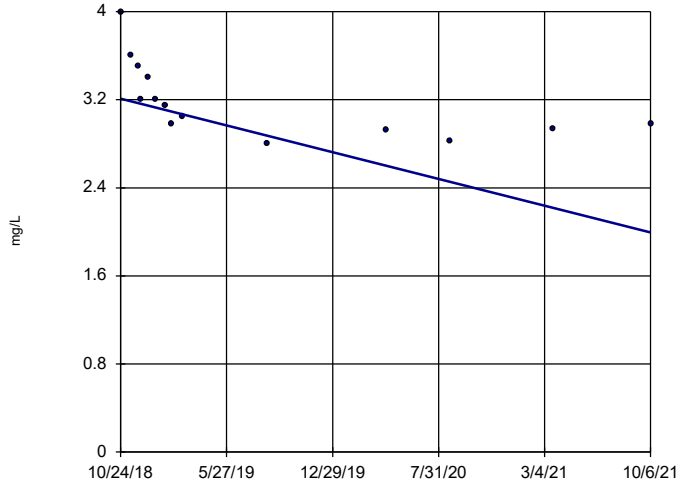
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -0.412 units per year.

Mann-Kendall statistic = -67 critical = -48

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

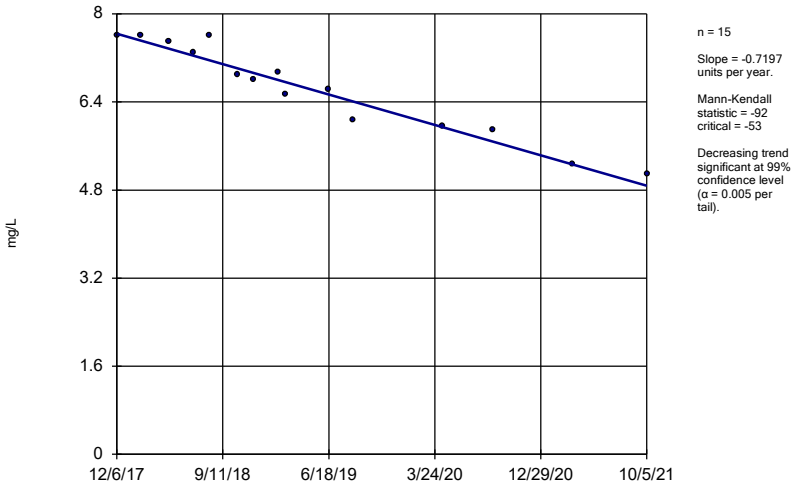
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 15

Slope = -0.7197 units per year.

Mann-Kendall statistic = -92 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

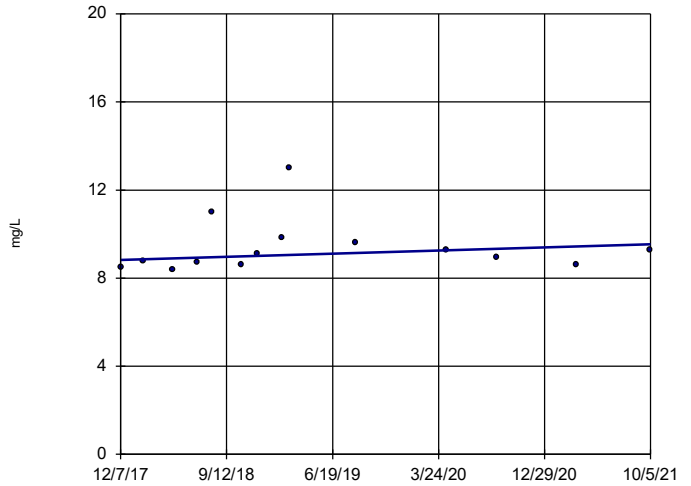
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 14

Slope = 0.183 units per year.

Mann-Kendall statistic = 23 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

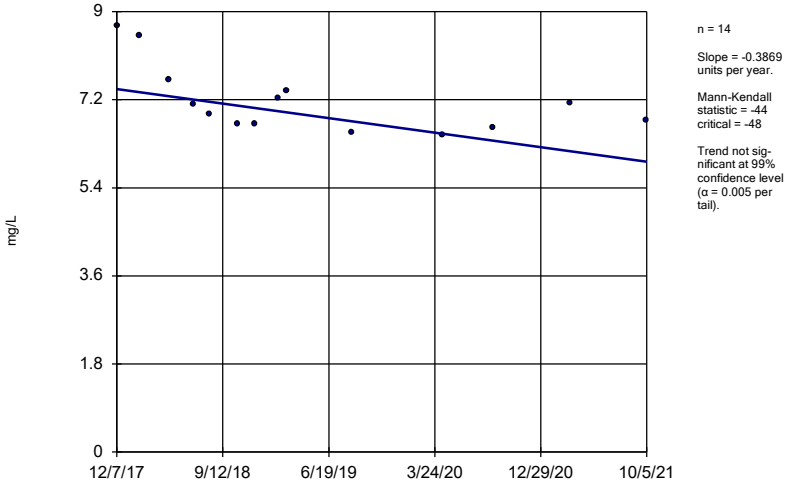
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 14

Slope = -0.3869 units per year.

Mann-Kendall statistic = -44 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

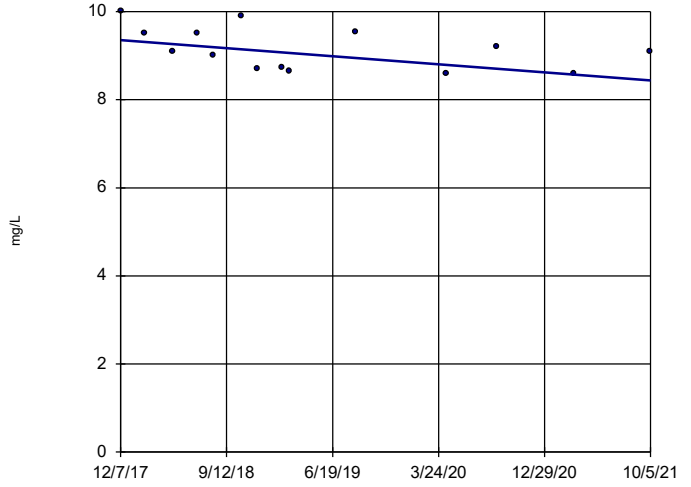
Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-6



n = 14

Slope = -0.2376 units per year.

Mann-Kendall statistic = -40 critical = -48

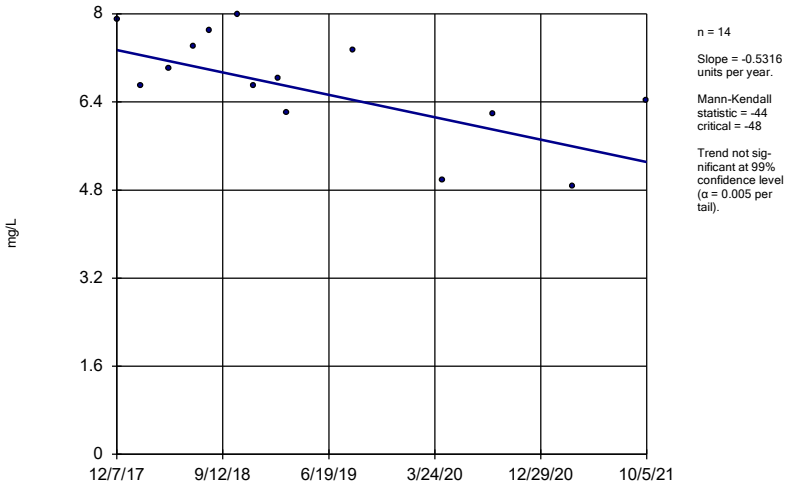
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-7



n = 14

Slope = -0.5316 units per year.

Mann-Kendall statistic = -44
critical = -48

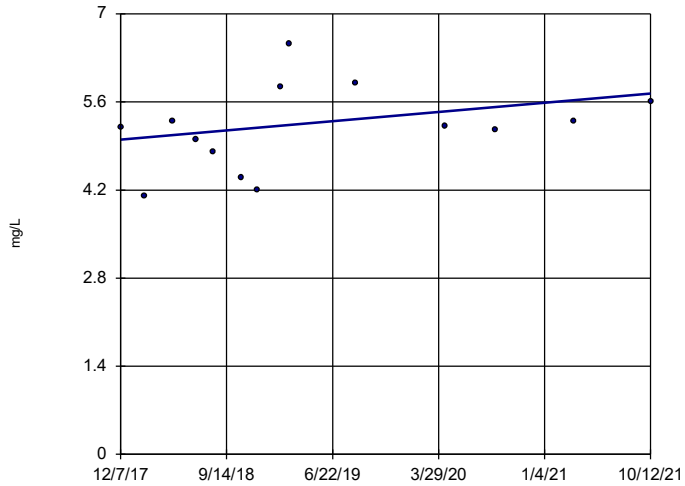
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-8



n = 14

Slope = 0.1905 units per year.

Mann-Kendall statistic = 26
critical = 48

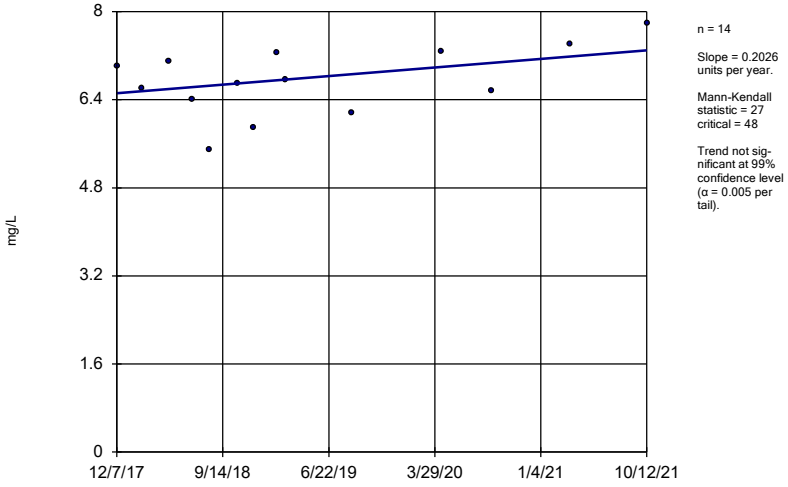
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 14

Slope = 0.2026 units per year.

Mann-Kendall statistic = 27
critical = 48

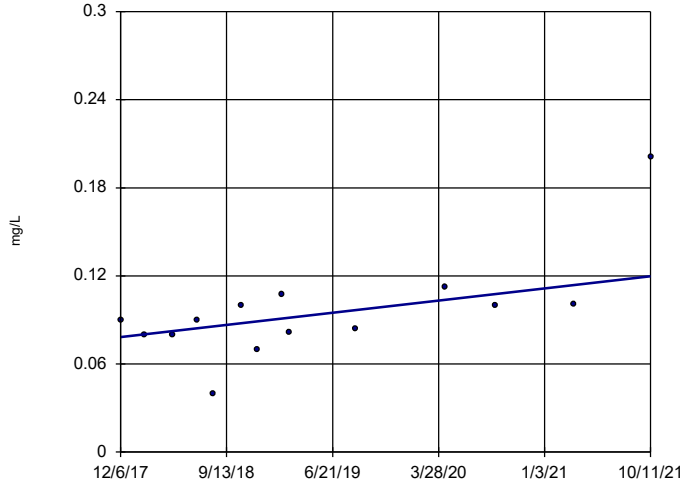
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 14

Slope = 0.01072 units per year.

Mann-Kendall statistic = 41
critical = 48

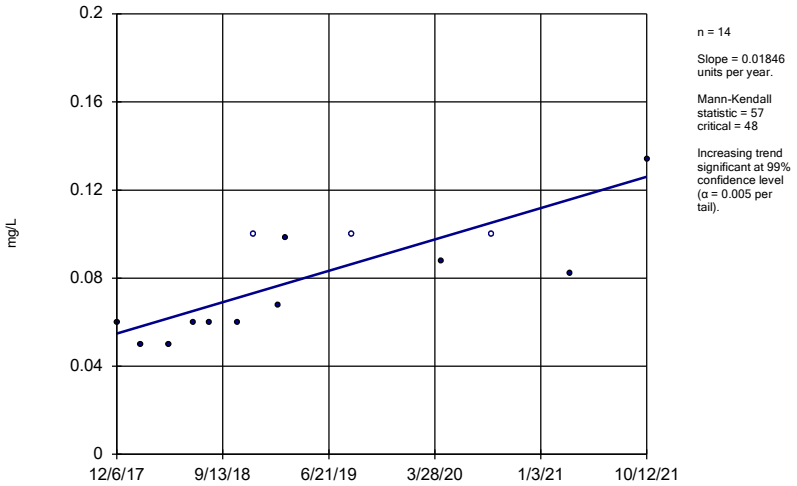
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-11



n = 14

Slope = 0.01846 units per year.

Mann-Kendall statistic = 57
critical = 48

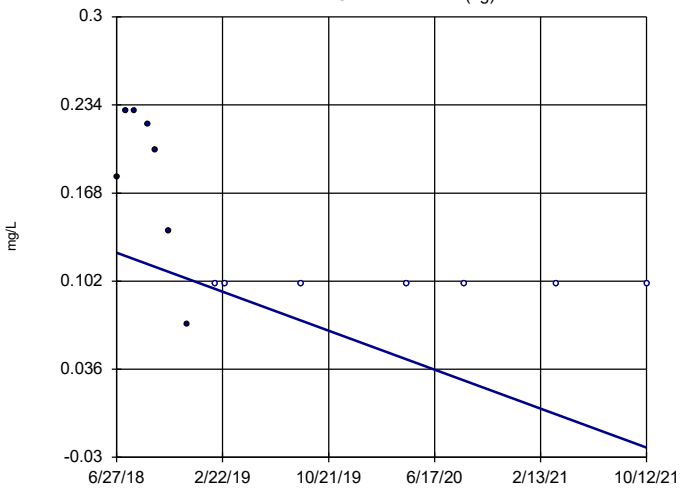
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -0.04431 units per year.

Mann-Kendall statistic = -47
critical = -48

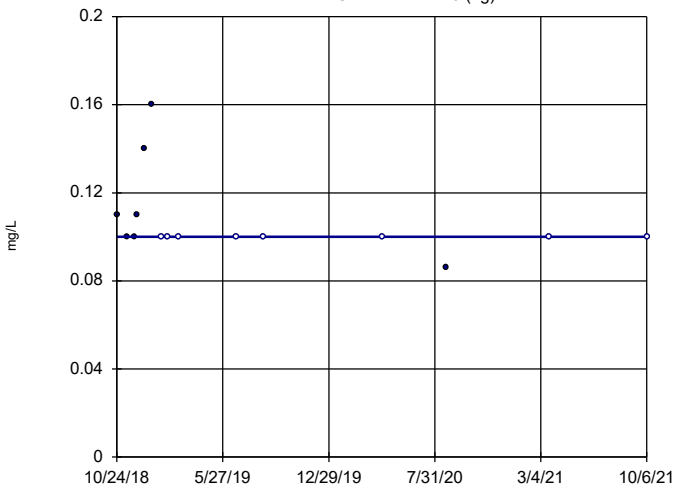
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = -33
critical = -53

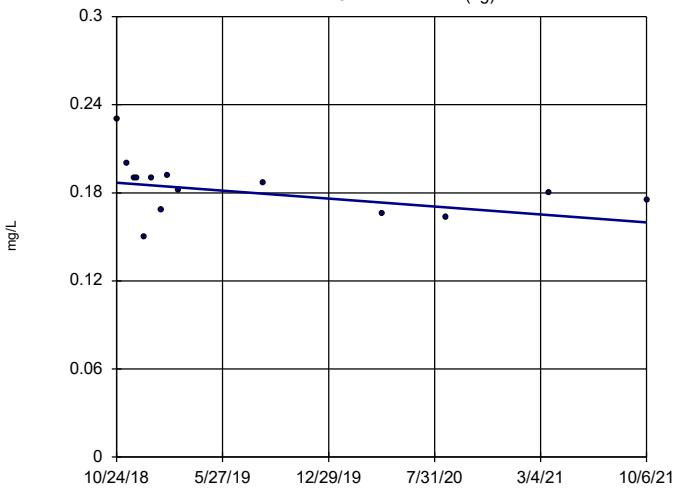
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -0.009217 units per year.

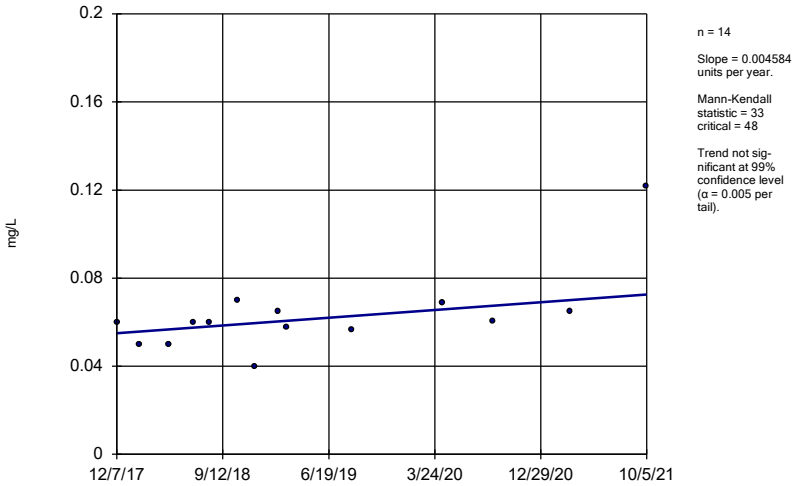
Mann-Kendall statistic = -44
critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-5



n = 14

Slope = 0.004584 units per year.

Mann-Kendall statistic = 33
critical = 48

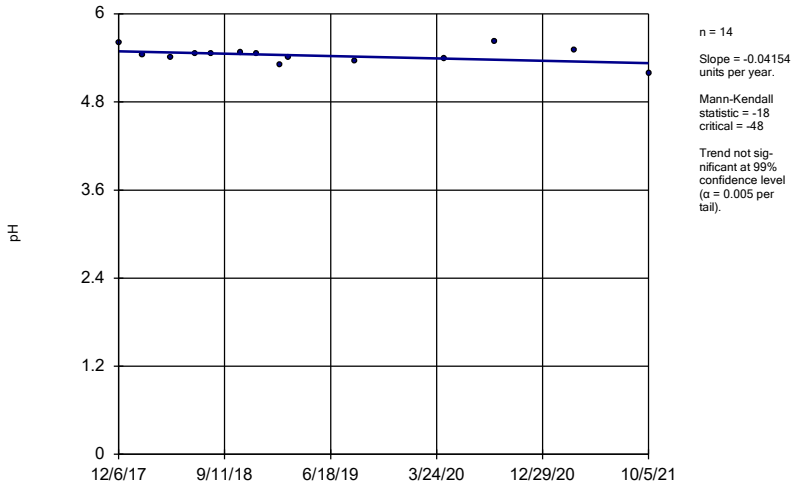
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 14

Slope = -0.04154 units per year.

Mann-Kendall statistic = -18
critical = -48

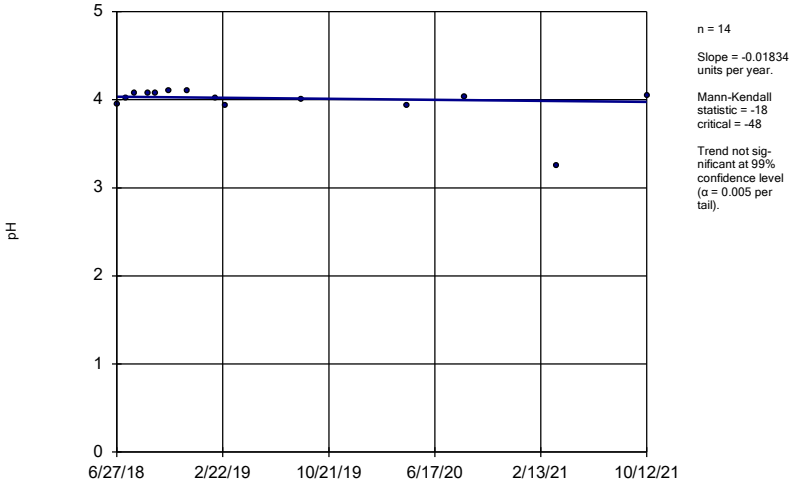
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -0.01834 units per year.

Mann-Kendall statistic = -18
critical = -48

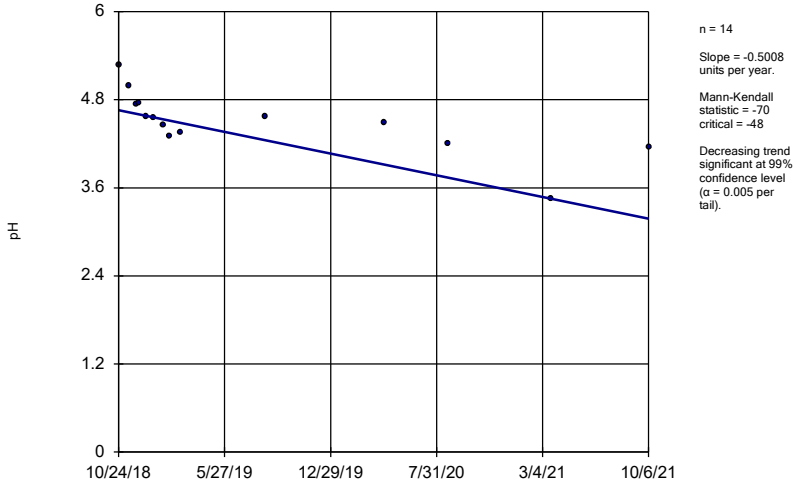
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 14

Slope = -0.5008 units per year.

Mann-Kendall statistic = -70
critical = -48

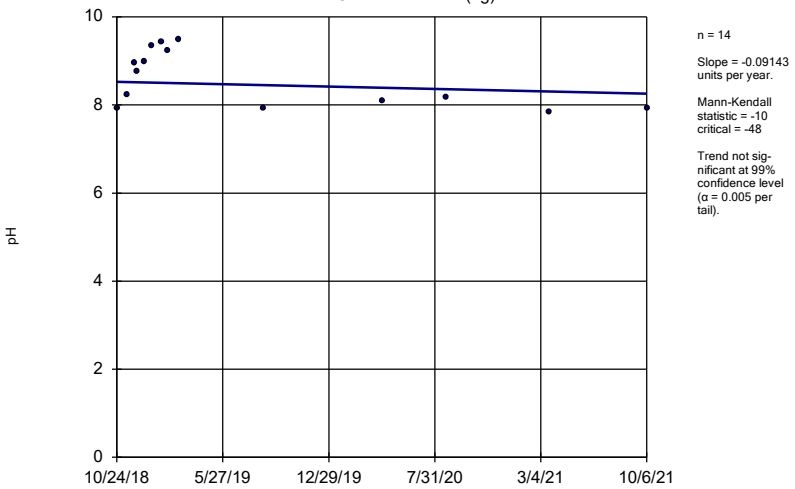
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -0.09143 units per year.

Mann-Kendall statistic = -10
critical = -48

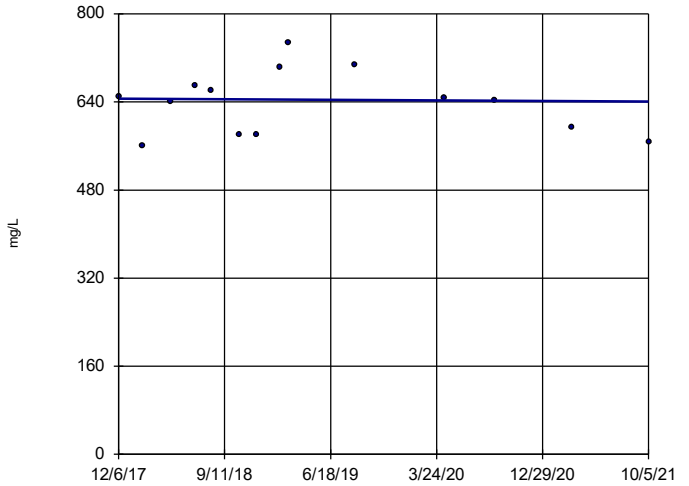
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 14

Slope = -1.272 units per year.

Mann-Kendall statistic = -2
critical = -48

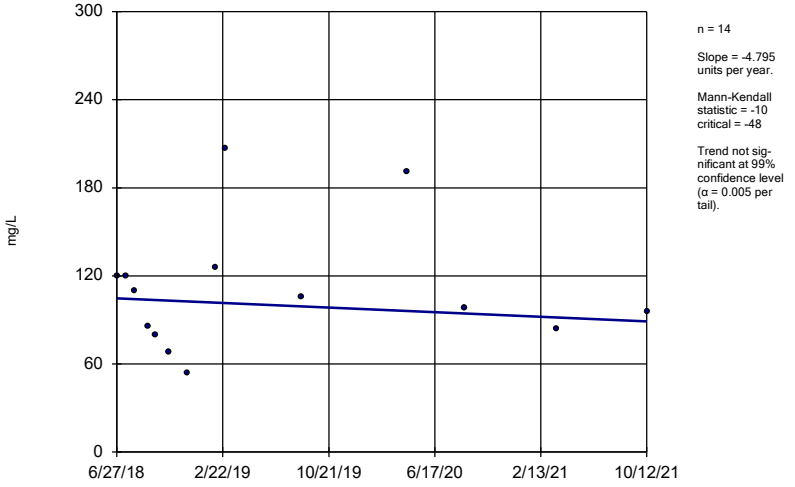
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/13/2022 2:46 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -4.795 units per year.

Mann-Kendall statistic = -10
critical = -48

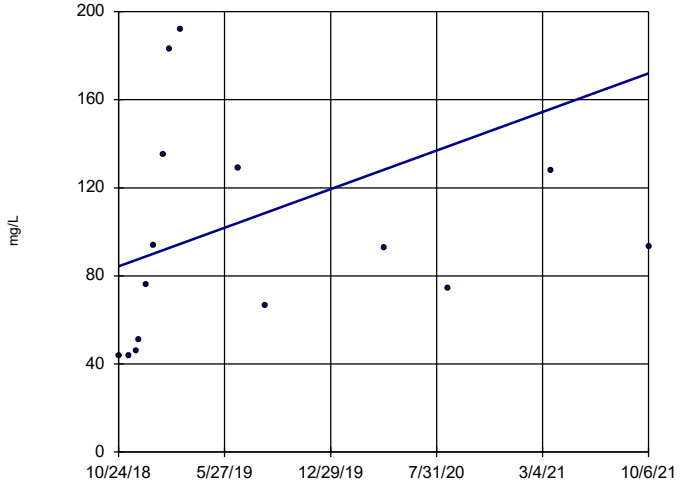
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 29.67 units per year.

Mann-Kendall statistic = 42
critical = 53

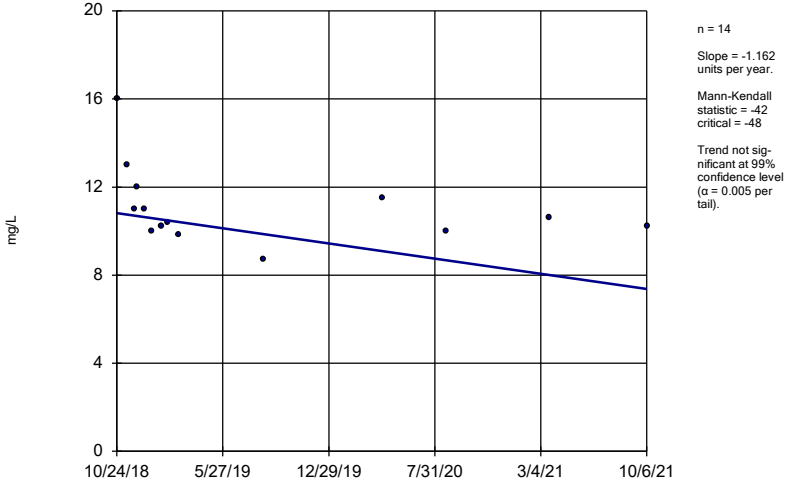
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -1.162 units per year.

Mann-Kendall statistic = -42
critical = -48

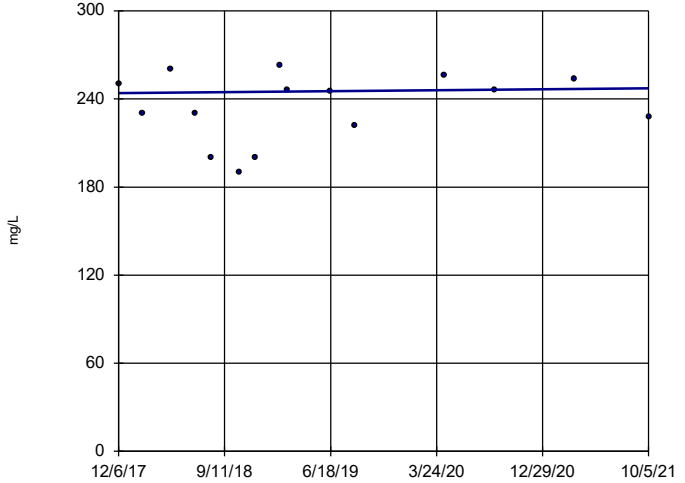
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 15

Slope = 0.8391 units per year.

Mann-Kendall statistic = 4
critical = 53

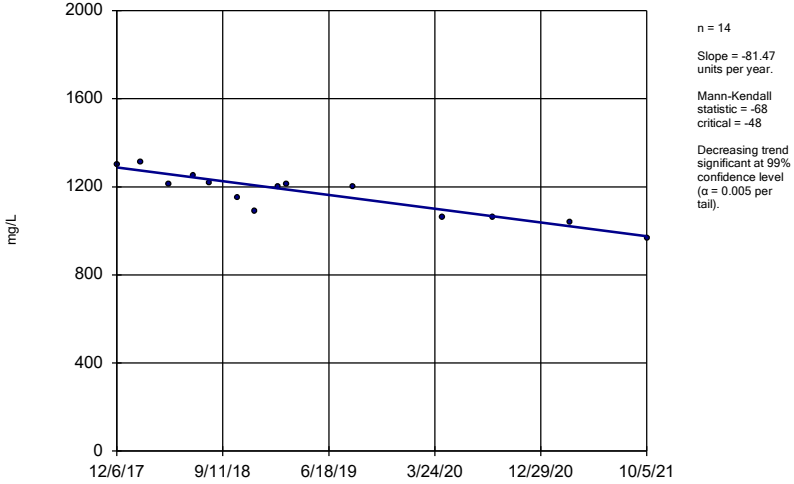
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 14

Slope = -81.47 units per year.

Mann-Kendall statistic = -68
critical = -48

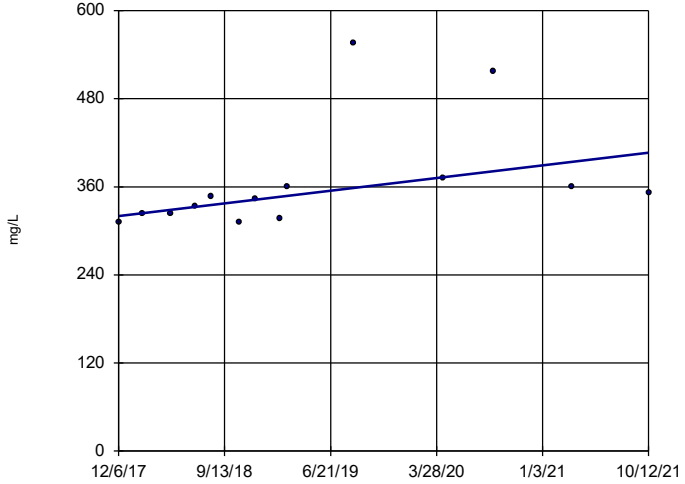
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 14

Slope = 22.44 units per year.

Mann-Kendall statistic = 49
critical = 48

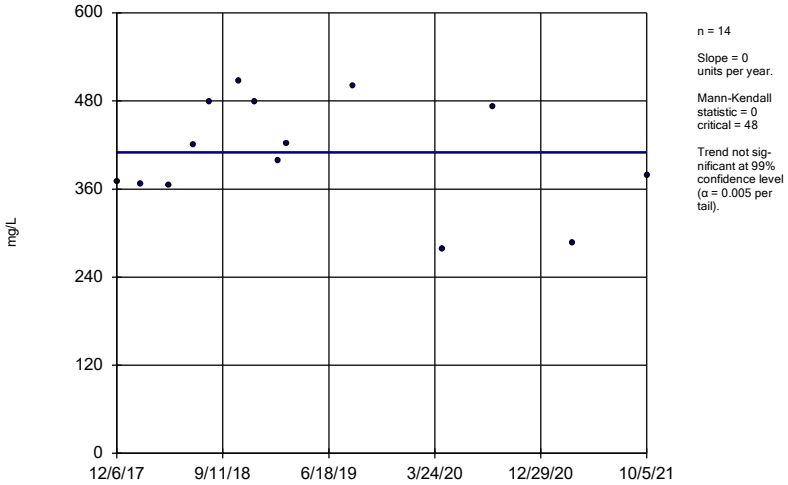
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 14

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 48

Trend not significant at 99% confidence level (α = 0.005 per tail).

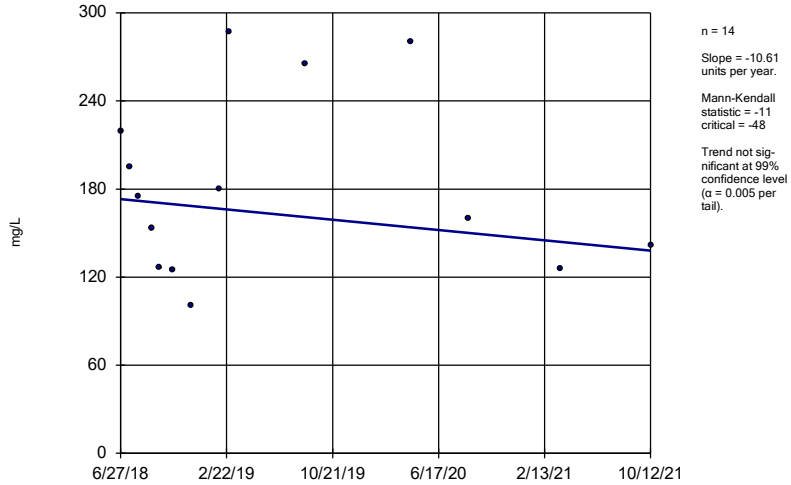
Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 14

Slope = -10.61 units per year.

Mann-Kendall statistic = -11 critical = -48

Trend not significant at 99% confidence level (α = 0.005 per tail).

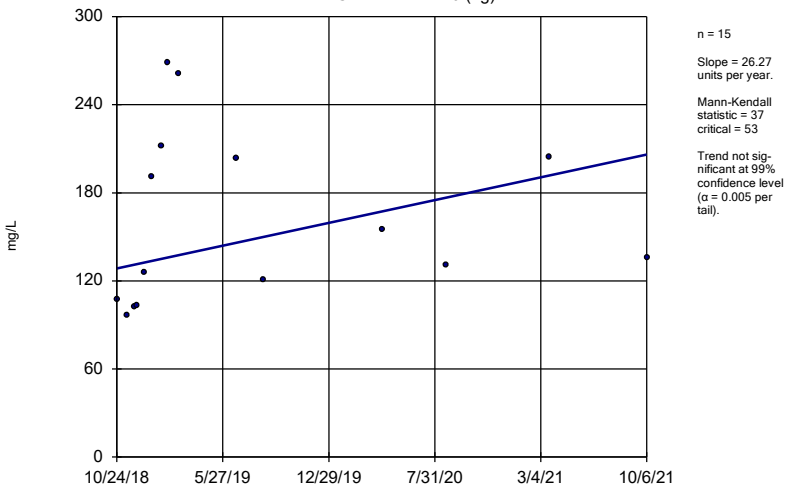
Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = 26.27 units per year.

Mann-Kendall statistic = 37 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

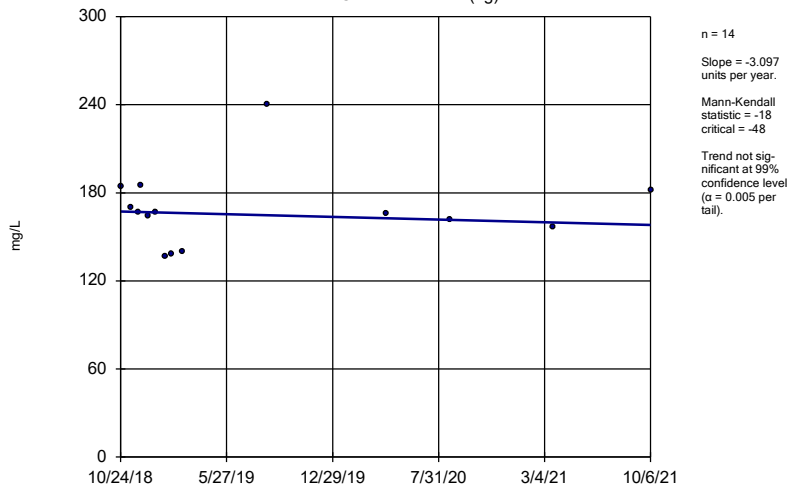
Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 14

Slope = -3.097 units per year.

Mann-Kendall statistic = -18 critical = -48

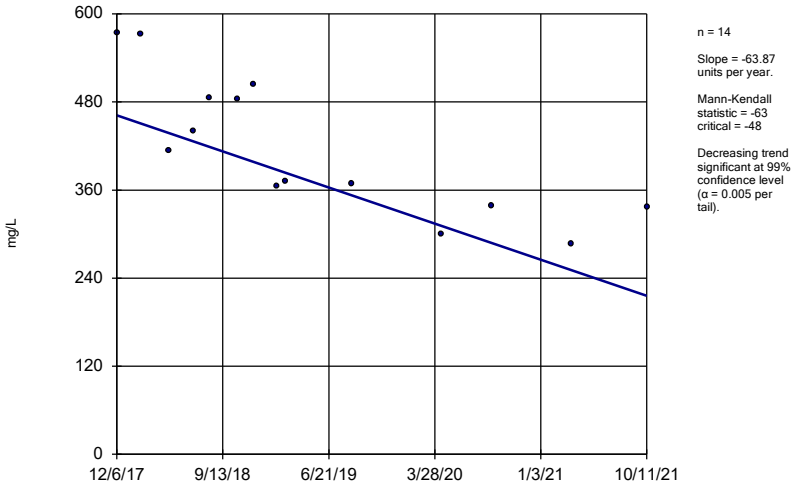
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-2



n = 14

Slope = -63.87 units per year.

Mann-Kendall statistic = -63
critical = -48

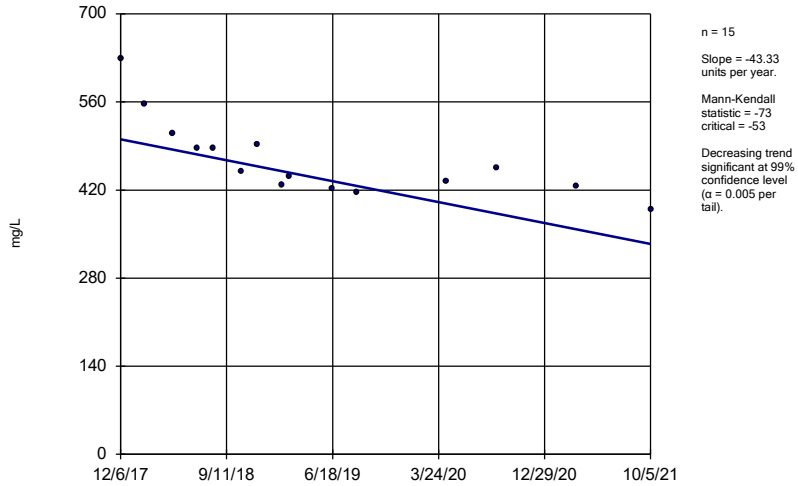
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 15

Slope = -43.33 units per year.

Mann-Kendall statistic = -73
critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 1/13/2022 2:47 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE I.

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

FIGURE J.

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00101	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.056	0.056
Combined Radium-226/228	pCi/L	2.01	5
Fluoride	mg/L	0.23	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

FIGURE K.

Appendix IV - Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.8867**	**0.4825**	**0.01**	**Yes**	**8**	**0.1907**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01443**	**0.01112**	**0.01**	**Yes**	**8**	**0.001561**	**0**	**No**	**0.01**	**Param.**

Appendix IV - Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-PZ-5	0.00114	0.00102	0.006	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-6	0.00181	0.00102	0.006	No	8	0.0002793	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.004635	0.003167	0.01	No	8	0.0006925	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004268	0.002367	0.01	No	8	0.0008972	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002875	0.002467	0.01	No	8	0.0001991	0	x^2	0.01	Param.
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.8867**	**0.4825**	**0.01**	**Yes**	**8**	**0.1907**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.00021	0.0002	0.01	No	8	0.000003536	75	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01443**	**0.01112**	**0.01**	**Yes**	**8**	**0.001561**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.0002	0.0000817	0.01	No	8	0.00004545	75	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.0002	0.00007	0.01	No	8	0.00004596	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003237	0.002685	0.01	No	8	0.0002603	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.00118	0.0002	0.01	No	8	0.0004166	50	No	0.004	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-2	0.0002	0.0000826	0.01	No	4	0.00006571	50	No	0.0625	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.0002	0.0000808	0.01	No	8	0.00004214	87.5	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.04302	0.03178	2	No	8	0.005302	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3583	0.272	2	No	8	0.0407	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.331	0.165	2	No	8	0.07117	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-MW-12	0.05203	0.03202	2	No	8	0.009438	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.07826	0.04999	2	No	8	0.01334	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.0545	0.0344	2	No	8	0.00667	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-MW-4	0.208	0.1663	2	No	8	0.01968	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2509	0.2179	2	No	8	0.01556	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07455	0.0586	2	No	8	0.007523	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08968	0.06367	2	No	8	0.01227	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.2499	0.1821	2	No	8	0.03199	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1978	0.1452	2	No	8	0.02484	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.09461	0.05414	2	No	8	0.01909	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1828	0.006264	2	No	4	0.03889	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.126	0.0494	2	No	8	0.03219	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.0311	0.02888	2	No	8	0.001049	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.0002	0.0001	0.005	No	8	0.00004583	75	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-12	0.00069	0.0004022	0.005	No	8	0.0001357	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.0002	0.0000688	0.005	No	8	0.00004639	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.000438	0.0002	0.005	No	8	0.00009918	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-7	0.0002	0.000097	0.005	No	8	0.00003642	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.0002	0.0000832	0.005	No	8	0.0000413	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.0002	0.00008	0.005	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.00102	0.00023	0.1	No	8	0.0003342	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-10	0.00102	0.00028	0.1	No	8	0.0003269	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-11	0.00102	0.00027	0.1	No	8	0.0002981	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-12	0.00102	0.00034	0.1	No	8	0.0002947	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-2	0.00102	0.00047	0.1	No	8	0.0002523	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-3	0.00285	0.00023	0.1	No	8	0.0008008	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-4	0.00102	0.000323	0.1	No	8	0.0002464	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.00102	0.00028	0.1	No	8	0.000317	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-6	0.00102	0.00025	0.1	No	8	0.0003369	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-7	0.00102	0.00025	0.1	No	8	0.000323	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-8	0.00102	0.0003	0.1	No	8	0.0002546	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.00102	0.00031	0.1	No	8	0.0003042	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-1	0.00102	0.00035	0.1	No	8	0.0002899	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-2	0.001027	0.00008704	0.1	No	4	0.0003163	50	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.00102	0.00034	0.1	No	8	0.0002748	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-6	0.00102	0.00031	0.1	No	8	0.0002832	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-1	0.02458	0.0164	0.056	No	8	0.003859	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.00089	0.000203	0.056	No	8	0.0002416	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-11	0.00756	0.000203	0.056	No	8	0.003052	50	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-12	0.005722	0.003605	0.056	No	8	0.0009986	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-2	0.04018	0.02285	0.056	No	8	0.008175	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02557	0.01775	0.056	No	8	0.003689	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.0277	0.0231	0.056	No	8	0.002167	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.00233	0.000203	0.056	No	8	0.0007658	12.5	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-6	0.00104	0.000203	0.056	No	8	0.0003829	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-7	0.00102	0.00018	0.056	No	8	0.0002901	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-8	0.003677	0.001444	0.056	No	8	0.001466	25	x^2	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.00113	0.000203	0.056	No	8	0.0004069	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.000203	0.056	No	8	0.00008379	87.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.008085	0.00006002	0.056	No	4	0.001767	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00227	0.00008	0.056	No	8	0.0009513	50	No	0.004	NP (normality)

Appendix IV - Confidence Intervals - All Results

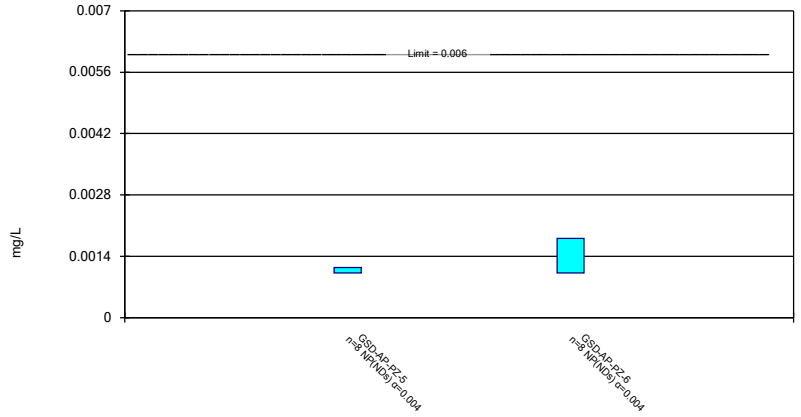
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/11/2022, 3:53 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-PZ-6	0.000203	0.000108	0.056	No	8	0.00003756	75	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	0.9405	0.3485	5	No	8	0.2792	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	2.742	0.0046	5	No	8	2.17	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.318	0.7526	5	No	8	0.2668	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.226	0.1273	5	No	8	0.5182	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.54	0.2978	5	No	8	0.6692	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.65	0.1921	5	No	8	0.9789	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.285	0.1217	5	No	8	0.5489	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.235	0.3811	5	No	8	0.4027	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	1.36	-0.086	5	No	8	0.4386	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	0.9326	0.07467	5	No	8	0.4047	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.7288	0.2854	5	No	8	0.2092	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.146	0.1025	5	No	8	0.4922	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	2.07	-0.129	5	No	8	0.678	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	1.673	-0.496	5	No	4	0.4778	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.7655	0.172	5	No	8	0.28	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.116	0.003433	5	No	8	0.4985	0	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.1	0.04	4	No	8	0.026	62.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.1425	0.07281	4	No	8	0.04055	0	ln(x)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-11	0.1109	0.06956	4	No	8	0.01912	37.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-12	0.1	0.1	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-2	0.2781	0.1802	4	No	8	0.04616	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.1	0.0592	4	No	8	0.01915	62.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2536	0.2094	4	No	8	0.02083	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.0889	0.04612	4	No	8	0.02389	0	ln(x)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-6	0.1	0.0581	4	No	8	0.0153	75	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-7	0.08844	0.06404	4	No	8	0.01568	37.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-8	0.1098	0.06858	4	No	8	0.01946	12.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.148	0.08501	4	No	8	0.03587	12.5	x^2	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1038	0.07601	4	No	8	0.0133	25	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-5	0.1	0.1	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-PZ-6	0.1	0.1	4	No	8	0	100	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-MW-2	0.0002	0.00009	0.015	No	8	0.00003889	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.0002	0.00012	0.015	No	4	0.00003873	50	No	0.0625	NP (normality)
Lead (mg/L)	GSD-AP-PZ-5	0.0002	0.00013	0.015	No	8	0.00002475	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.0002	0.0000835	0.015	No	8	0.00004652	75	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.06589	0.02824	0.04	No	8	0.01776	0	No	0.01	Param.
Mercury (mg/L)	GSD-AP-MW-10	0.0005	0.000302	0.002	No	8	0.00007	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-7	0.0005	0.00034	0.002	No	8	0.00005657	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-8	0.0005	0.000284	0.002	No	8	0.00007637	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.00045	0.000203	0.1	No	8	0.00008728	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-11	0.000203	0.000124	0.1	No	8	0.00003133	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.02559	0.01494	0.1	No	8	0.005024	0	No	0.01	Param.
Molybdenum (mg/L)	GSD-AP-MW-4	0.00118	0.000203	0.1	No	8	0.0004365	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-5	0.000203	0.00015	0.1	No	8	0.00001874	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.000203	0.0001	0.1	No	8	0.00003642	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.000357	0.000203	0.1	No	8	0.0000635	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-9	0.00027	0.00018	0.1	No	8	0.00002612	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.000203	0.00007	0.1	No	8	0.00005544	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.00028	0.000203	0.1	No	4	0.0000385	75	No	0.0625	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.0002	0.000112	0.002	No	8	0.00003111	87.5	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.0003549	0.0002241	0.002	No	8	0.00006169	12.5	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.0002	0.000121	0.002	No	8	0.00003257	75	No	0.004	NP (NDs)

Sanitas™ v.9.6.32 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

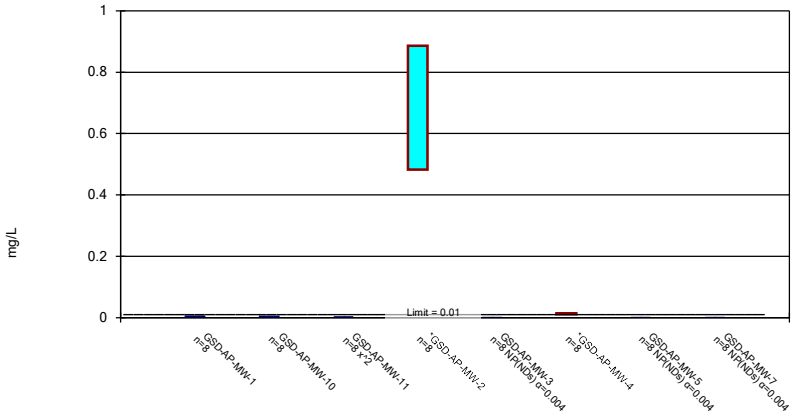


Constituent: Antimony Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

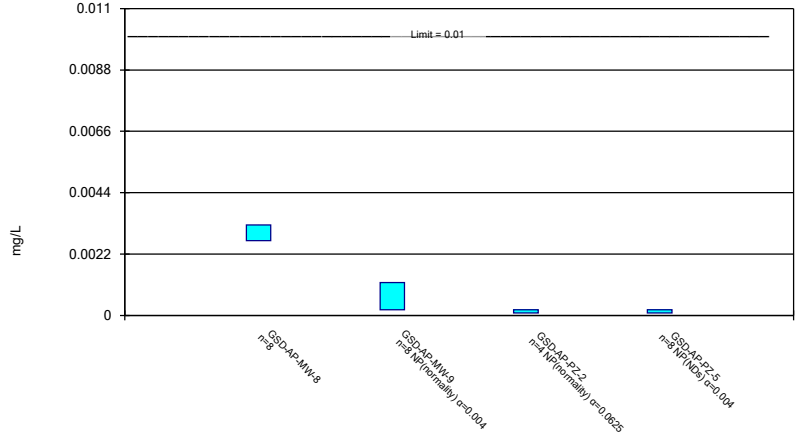


Constituent: Arsenic Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

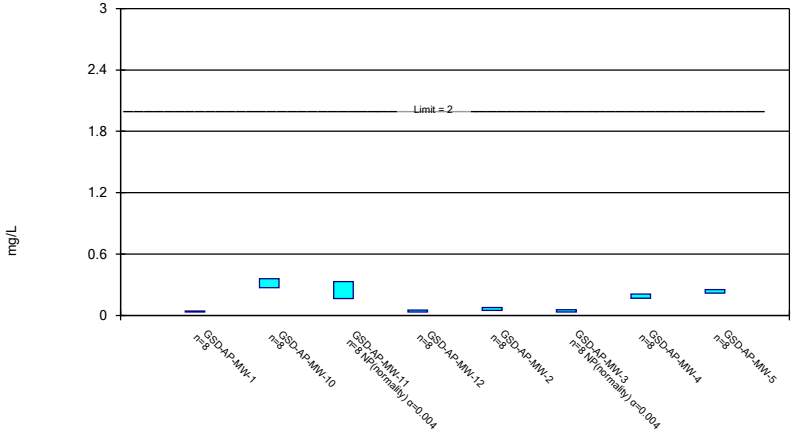


Constituent: Arsenic Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

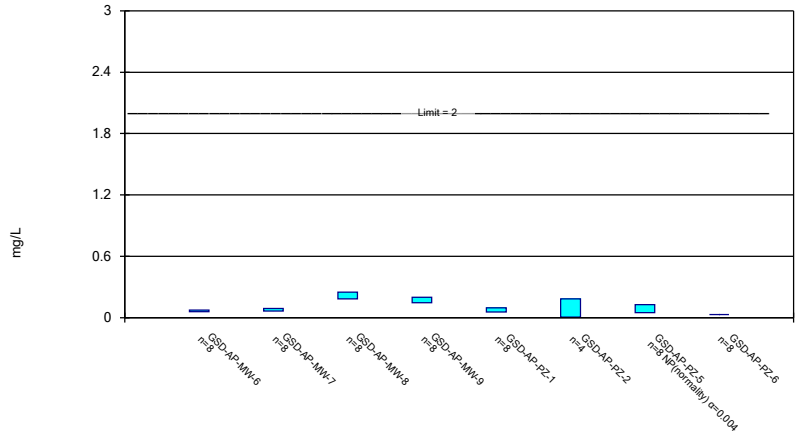


Constituent: Barium Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

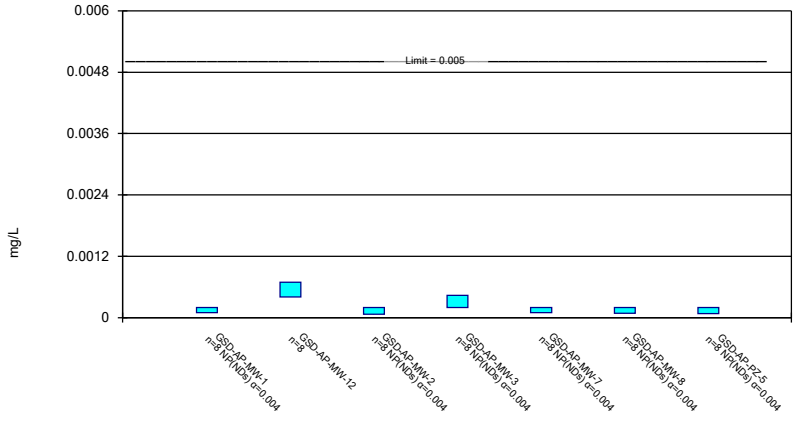


Constituent: Barium Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

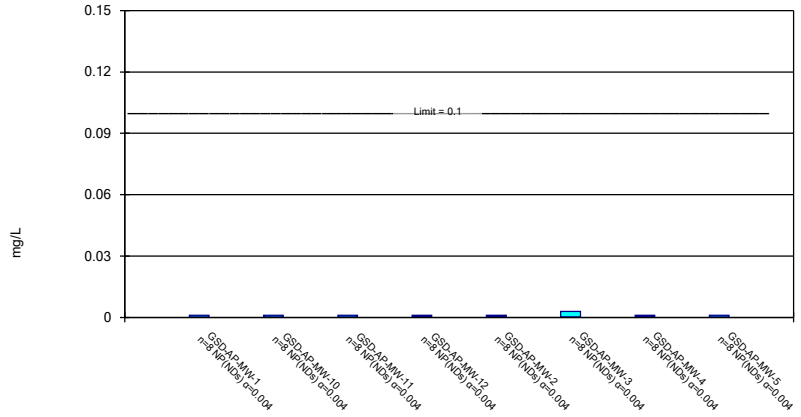


Constituent: Cadmium Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

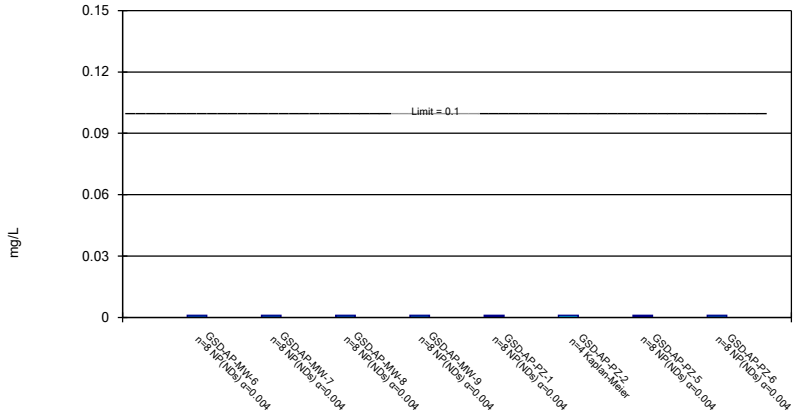


Constituent: Chromium Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

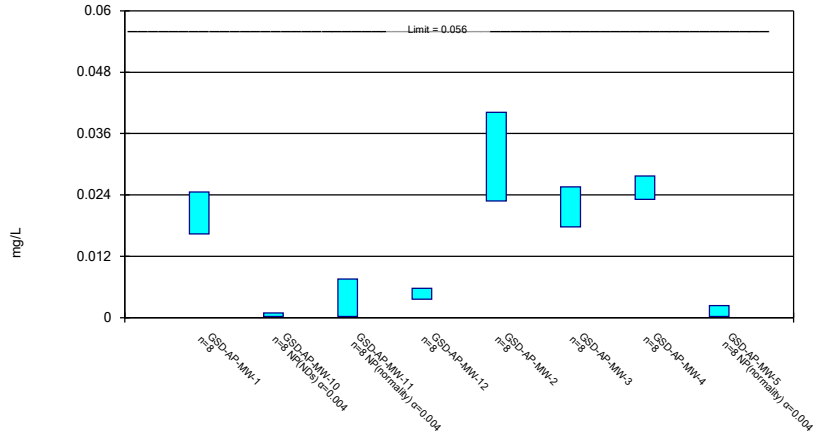


Constituent: Chromium Analysis Run 1/11/2022 3:49 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

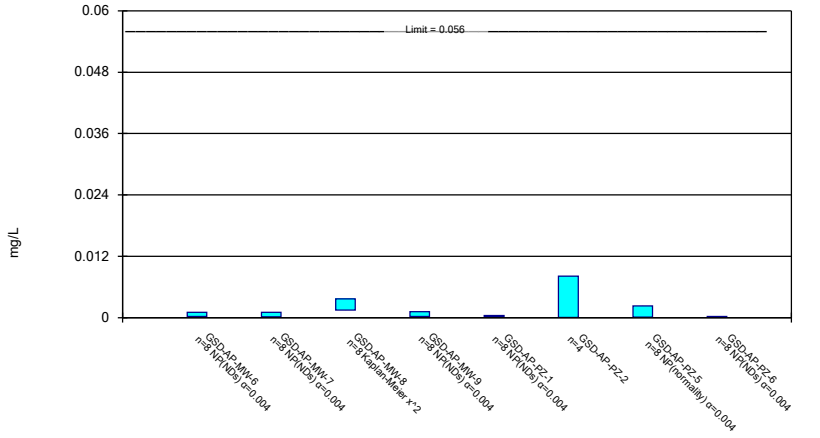


Constituent: Cobalt Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

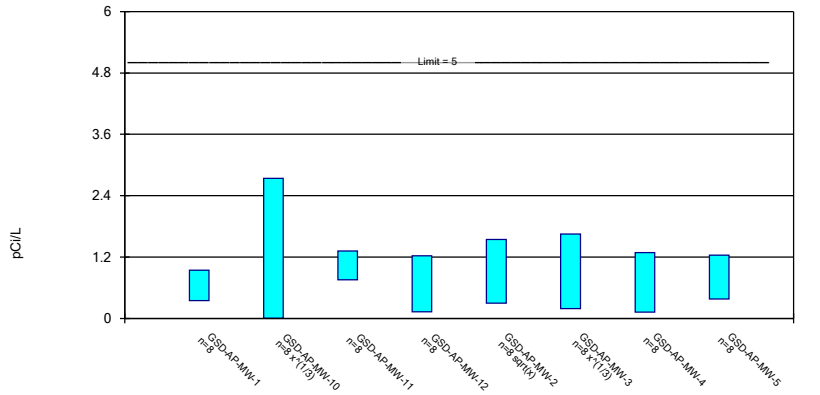


Constituent: Cobalt Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

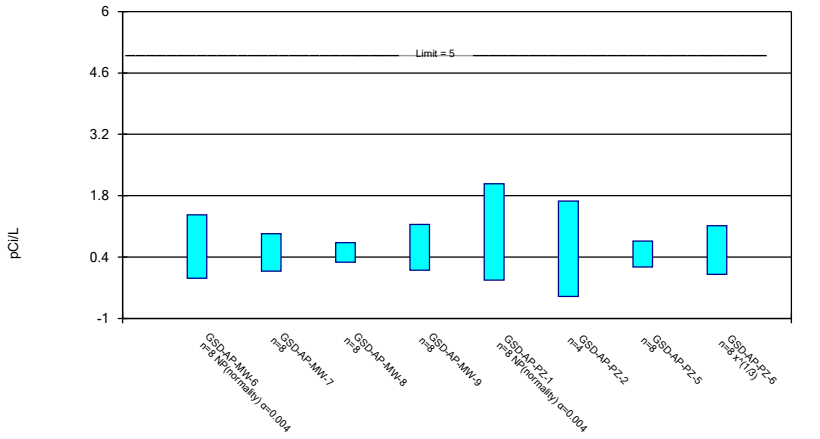


Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

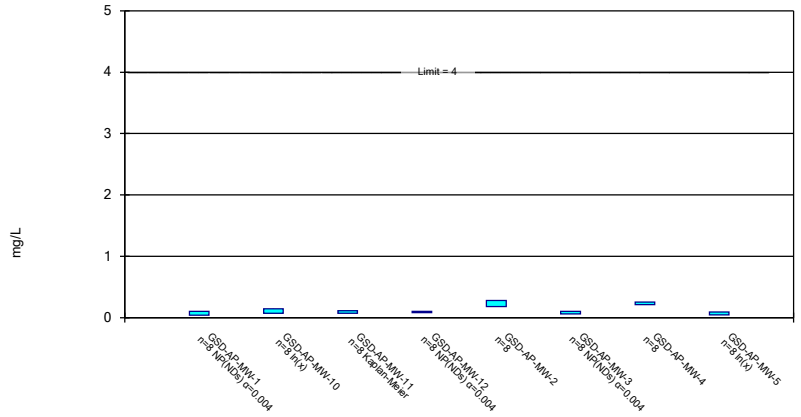


Constituent: Combined Radium 226 + 228 Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

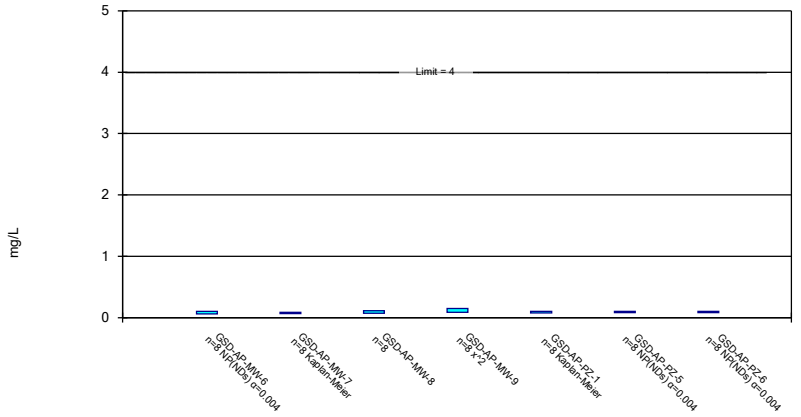


Constituent: Fluoride Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

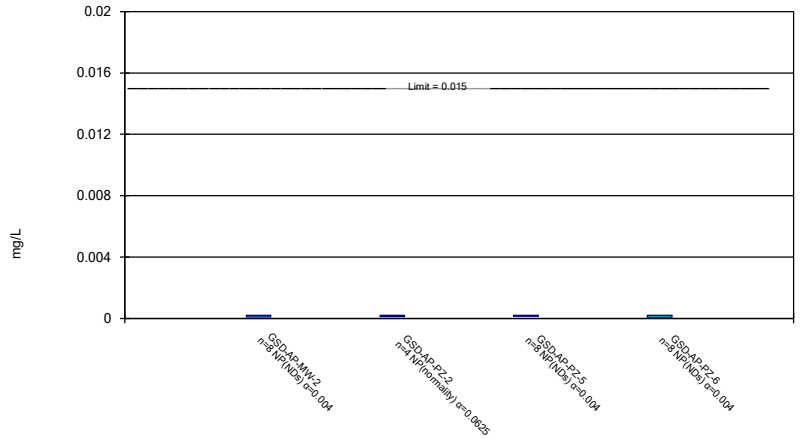


Constituent: Fluoride Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

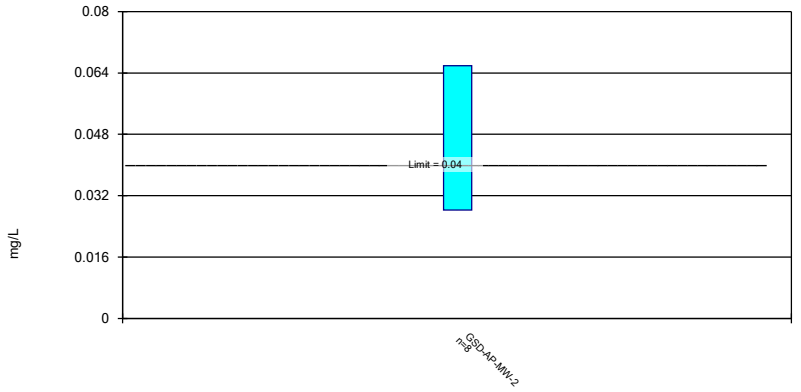


Constituent: Lead Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

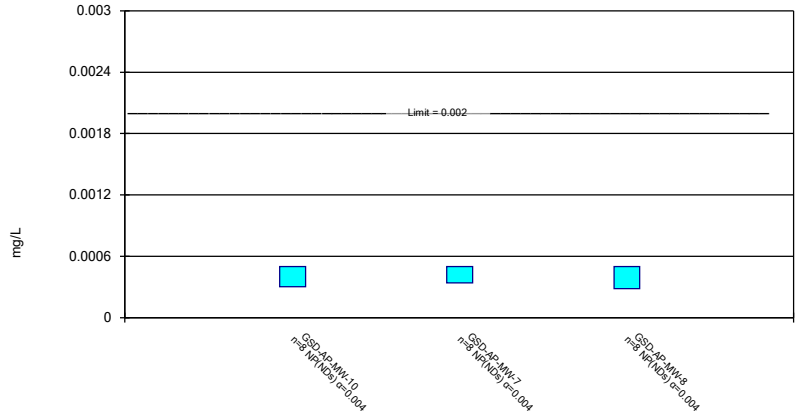


Constituent: Lithium Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

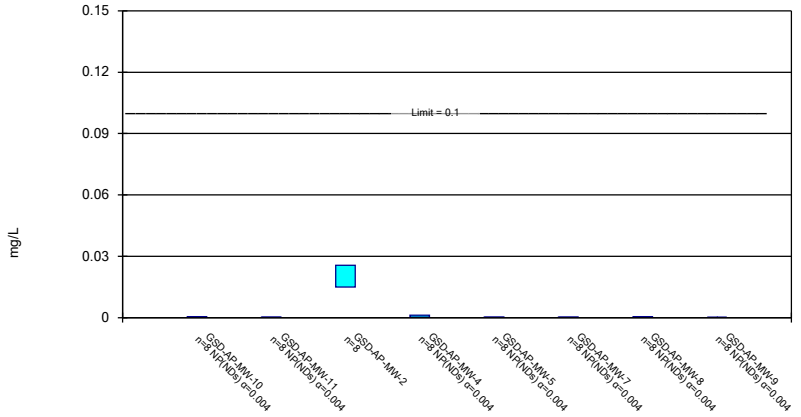


Constituent: Mercury Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

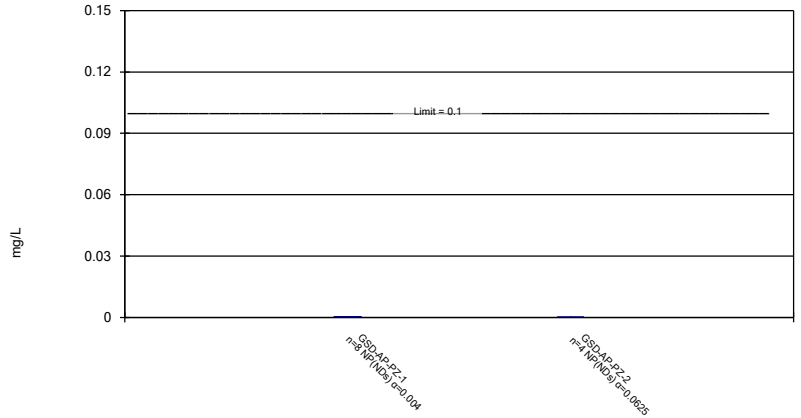


Constituent: Molybdenum Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

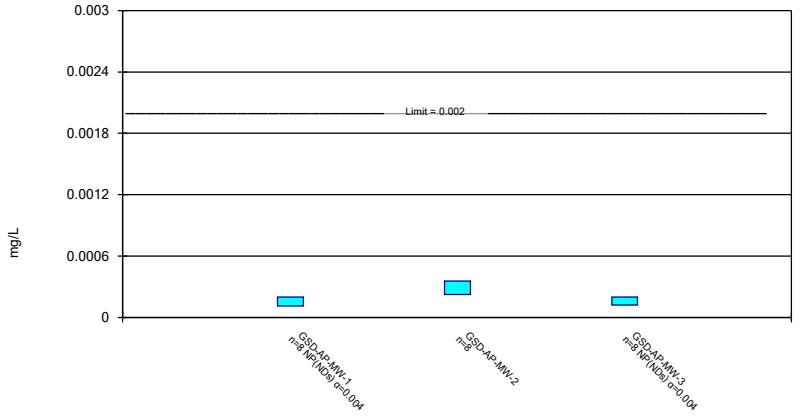


Constituent: Molybdenum Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.32 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 1/11/2022 3:50 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-6
10/23/2018	<0.00102	<0.00102
12/3/2018	<0.00102	<0.00102
2/7/2019	0.00114 (J)	0.00181 (J)
8/21/2019	<0.00102	<0.00102
4/15/2020	<0.00102	<0.00102
8/24/2020	<0.00102	<0.00102
3/16/2021	<0.00102	<0.00102
10/12/2021	<0.00102	<0.00102
Mean	0.001035	0.001119
Std. Dev.	4.243E-05	0.0002793
Upper Lim.	0.00114	0.00181
Lower Lim.	0.00102	0.00102

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-7
10/22/2018	0.00451 (J)	0.00404 (J)		1.01		0.0144		
10/23/2018			0.00287 (J)				<0.0002	<0.0002
12/3/2018					<0.0002	0.0119		
12/4/2018	0.00471 (J)	0.00332 (J)	0.00271 (J)	0.553				<0.0002
12/5/2018							<0.0002	
2/5/2019	0.00365 (J)			0.74	<0.0002	0.0107	<0.0002	
2/6/2019		0.00333 (J)	0.00272 (J)					<0.0002
6/18/2019					<0.0002			
8/20/2019				0.825	<0.0002	0.0141	<0.0002	
8/21/2019	0.00444 (J)							<0.0002
8/22/2019		0.00394 (J)	0.00229 (J)					
4/13/2020					<0.0002		<0.0002	
4/14/2020			0.00286 (J)					
4/15/2020	0.00309 (J)	0.00236 (J)		0.709		0.0121		<0.0002
8/24/2020							<0.0002	
8/25/2020	0.00435 (J)			0.727				
8/26/2020		0.00422 (J)	0.00246 (J)		<0.0002	0.0133		<0.0002
3/16/2021	0.0029						8.17E-05 (J)	
3/22/2021					0.0002 (J)			
3/23/2021		0.00163	0.00275					<0.0002
3/24/2021				0.489		0.011		
10/5/2021	0.00356				0.00021	0.0147	0.00013 (J)	7E-05 (J)
10/11/2021		0.0037		0.424				
10/12/2021			0.00272					
Mean	0.003901	0.003318	0.002673	0.6846	0.0002012	0.01278	0.0001765	0.0001837
Std. Dev.	0.0006925	0.0008972	0.0001991	0.1907	3.536E-06	0.001561	4.545E-05	4.596E-05
Upper Lim.	0.004635	0.004268	0.002875	0.8867	0.00021	0.01443	0.0002	0.0002
Lower Lim.	0.003167	0.002367	0.002467	0.4825	0.0002	0.01112	8.17E-05	7E-05

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-2	GSD-AP-PZ-5
10/23/2018	0.00246 (J)	<0.0002		<0.0002
12/3/2018				<0.0002
12/4/2018	0.00328 (J)			
12/5/2018		0.00111 (J)		
2/6/2019	0.00325 (J)	<0.0002		
2/7/2019				<0.0002
8/21/2019	0.00302 (J)	<0.0002		<0.0002
4/13/2020			<0.0002	
4/14/2020	0.00295 (J)	0.00118 (J)		
4/15/2020				<0.0002
8/24/2020			<0.0002	<0.0002
8/26/2020	0.00304 (J)	<0.0002		
3/16/2021				8.08E-05 (J)
3/17/2021			8.26E-05 (J)	
3/23/2021	0.00282	0.00063		
10/5/2021			9E-05 (J)	
10/12/2021	0.00287	0.00064		<0.0002
Mean	0.002961	0.000545	0.0001431	0.0001851
Std. Dev.	0.0002603	0.0004166	6.571E-05	4.214E-05
Upper Lim.	0.003237	0.00118	0.0002	0.0002
Lower Lim.	0.002685	0.0002	8.26E-05	8.08E-05

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
10/22/2018	0.0427	0.29			0.0536		0.209	
10/23/2018			0.311	0.054				0.26
12/3/2018						0.0545	0.214	
12/4/2018	0.0434	0.305	0.331		0.0589			
12/5/2018				0.0493				0.245
2/5/2019	0.0439				0.0418	0.0363	0.173	0.215
2/6/2019		0.265	0.286	0.036				
6/18/2019						0.0369		
8/20/2019					0.0685	0.0405	0.188	0.238
8/21/2019	0.037							
8/22/2019		0.302	0.214	0.0455				
4/13/2020						0.0349		0.241
4/14/2020			0.168	0.0279				
4/15/2020	0.0329	0.35			0.0607		0.159	
8/24/2020								0.238
8/25/2020	0.0358				0.0812			
8/26/2020		0.322	0.165	0.0503		0.0363	0.181	
3/16/2021	0.0331							0.217
3/22/2021						0.0354		
3/23/2021		0.395	0.169	0.0315				
3/24/2021					0.0676		0.171	
10/5/2021	0.0304			0.0417		0.0344	0.202	0.221
10/11/2021		0.292			0.0807			
10/12/2021			0.17					
Mean	0.0374	0.3151	0.2268	0.04203	0.06413	0.03865	0.1871	0.2344
Std. Dev.	0.005302	0.0407	0.07117	0.009438	0.01334	0.00667	0.01968	0.01556
Upper Lim.	0.04302	0.3583	0.331	0.05203	0.07826	0.0545	0.208	0.2509
Lower Lim.	0.03178	0.272	0.165	0.03202	0.04999	0.0344	0.1663	0.2179

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
10/22/2018					0.102			
10/23/2018	0.0608	0.0898	0.17	0.183			0.125	0.0298
12/3/2018	0.0633				0.0784		0.126	0.0307
12/4/2018		0.0789	0.189					
12/5/2018				0.186				
2/5/2019	0.0551				0.0578			
2/6/2019		0.0685	0.226	0.128				
2/7/2019							0.0602	0.028
8/20/2019	0.0731				0.097			
8/21/2019		0.0946	0.194	0.183			0.085	0.0312
4/13/2020	0.0635				0.0529	0.0832		
4/14/2020			0.262	0.186				
4/15/2020		0.0653					0.0535	0.0296
8/24/2020					0.0733	0.132	0.0565	0.031
8/26/2020	0.0771	0.0845	0.235	0.202				
3/16/2021							0.0553	0.0293
3/17/2021	0.0656					0.045		
3/23/2021		0.0602	0.249	0.157				
3/24/2021					0.0525			
10/5/2021	0.0741	0.0716			0.0811	0.118		
10/12/2021			0.203	0.147			0.0494	0.0303
Mean	0.06658	0.07668	0.216	0.1715	0.07438	0.09455	0.07636	0.02999
Std. Dev.	0.007523	0.01227	0.03199	0.02484	0.01909	0.03889	0.03219	0.001049
Upper Lim.	0.07455	0.08968	0.2499	0.1978	0.09461	0.1828	0.126	0.0311
Lower Lim.	0.0586	0.06367	0.1821	0.1452	0.05414	0.006264	0.0494	0.02888

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-PZ-5
10/22/2018	<0.0002		<0.0002				
10/23/2018		0.000552 (J)			<0.0002	<0.0002	<0.0002
12/3/2018				<0.0002			<0.0002
12/4/2018	<0.0002		<0.0002		<0.0002	<0.0002	
12/5/2018		0.000661 (J)					
2/5/2019	<0.0002		<0.0002	<0.0002			
2/6/2019		0.000583 (J)			<0.0002	<0.0002	
2/7/2019							<0.0002
6/18/2019				<0.0002			
8/20/2019			<0.0002	<0.0002			
8/21/2019	<0.0002				<0.0002	<0.0002	<0.0002
8/22/2019		0.000755 (J)					
4/13/2020				0.000438 (J)			
4/14/2020		0.000425 (J)				<0.0002	
4/15/2020	<0.0002		<0.0002		<0.0002		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002		<0.0002				
8/26/2020		0.000618 (J)		<0.0002	<0.0002	<0.0002	
3/16/2021	0.000102 (J)						<0.0002
3/22/2021				0.00039			
3/23/2021		0.000405			9.7E-05 (J)	8.32E-05 (J)	
3/24/2021			6.88E-05 (J)				
10/5/2021	0.0001 (J)	0.00037		0.00021	<0.0002		
10/11/2021			<0.0002				
10/12/2021						<0.0002	8E-05 (J)
Mean	0.0001752	0.0005461	0.0001836	0.0002547	0.0001871	0.0001854	0.000185
Std. Dev.	4.583E-05	0.0001357	4.639E-05	9.918E-05	3.642E-05	4.13E-05	4.243E-05
Upper Lim.	0.0002	0.00069	0.0002	0.000438	0.0002	0.0002	0.0002
Lower Lim.	0.0001	0.0004022	6.88E-05	0.0002	9.7E-05	8.32E-05	8E-05

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
10/22/2018	<0.00102	<0.00102			<0.00102		<0.00102	
10/23/2018			<0.00102	<0.00102				<0.00102
12/3/2018						<0.00102	<0.00102	
12/4/2018	<0.00102	<0.00102	<0.00102		<0.00102			
12/5/2018				<0.00102				<0.00102
2/5/2019	<0.00102				<0.00102	<0.00102	<0.00102	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102				
6/18/2019						0.00285 (J)		
8/20/2019					<0.00102	<0.00102	<0.00102	<0.00102
8/21/2019	<0.00102							
8/22/2019		<0.00102	<0.00102	<0.00102				
4/13/2020						<0.00102		<0.00102
4/14/2020			<0.00102	<0.00102				
4/15/2020	<0.00102	<0.00102			<0.00102		<0.00102	
8/24/2020								<0.00102
8/25/2020	<0.00102				<0.00102			
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	
3/16/2021	0.000376 (J)							0.000397 (J)
3/22/2021						0.000293 (J)		
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)				
3/24/2021					0.00047 (J)		0.000323 (J)	
10/5/2021	0.00023 (J)			0.00034 (J)		0.00023 (J)	<0.00102	0.00028 (J)
10/11/2021		0.00028 (J)			0.00048 (J)			
10/12/2021			0.00027 (J)					
Mean	0.0008407	0.0008437	0.0008629	0.0008614	0.0008837	0.001059	0.0009329	0.0008496
Std. Dev.	0.0003342	0.0003269	0.0002981	0.0002947	0.0002523	0.0008008	0.0002464	0.000317
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00102	0.00285	0.00102	0.00102
Lower Lim.	0.00023	0.00028	0.00027	0.00034	0.00047	0.00023	0.000323	0.00028

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
10/22/2018					<0.00102			
10/23/2018	<0.00102	<0.00102	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018	<0.00102				<0.00102		<0.00102	<0.00102
12/4/2018		<0.00102	<0.00102					
12/5/2018				<0.00102				
2/5/2019	<0.00102				<0.00102			
2/6/2019		<0.00102	<0.00102	<0.00102				
2/7/2019							<0.00102	<0.00102
8/20/2019	<0.00102				<0.00102			
8/21/2019		<0.00102	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020	<0.00102				<0.00102	<0.00102		
4/14/2020			<0.00102	<0.00102				
4/15/2020		<0.00102					<0.00102	<0.00102
8/24/2020					<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102	<0.00102	<0.00102				
3/16/2021							0.000534 (J)	0.000534 (J)
3/17/2021	0.000338 (J)					0.000764 (J)		
3/23/2021		0.000406 (J)	0.0003 (J)	0.000422 (J)				
3/24/2021					0.000442 (J)			
10/5/2021	0.00025 (J)	0.00025 (J)			0.00035 (J)	0.00035 (J)		
10/12/2021			<0.00102	0.00031 (J)			0.00034 (J)	0.00031 (J)
Mean	0.0008385	0.000847	0.00093	0.0008565	0.000864	0.0007885	0.0008742	0.0008705
Std. Dev.	0.0003369	0.000323	0.0002546	0.0003042	0.0002899	0.0003163	0.0002748	0.0002832
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00102	0.001027	0.00102	0.00102
Lower Lim.	0.00025	0.00025	0.0003	0.00031	0.00035	8.704E-05	0.00034	0.00031

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
10/22/2018	0.0243	<0.000203			0.0438		0.0259	
10/23/2018			<0.000203	0.00399 (J)				0.0023 (J)
12/3/2018						0.0238	0.0228	
12/4/2018	0.0166	<0.000203	<0.000203		0.0252			
12/5/2018				0.00466 (J)				0.00233 (J)
2/5/2019	0.0264				0.0362	0.0232	0.0263	0.0021 (J)
2/6/2019		<0.000203	<0.000203	0.00485 (J)				
6/18/2019						0.0263		
8/20/2019					0.0366	0.0257	0.0293	0.00223 (J)
8/21/2019	0.0242							
8/22/2019		<0.000203	0.00756	0.00658				
4/13/2020						0.0209		<0.000203
4/14/2020			<0.000203	0.0035 (J)				
4/15/2020	0.0178	<0.000203			0.0324		0.0252	
8/24/2020								0.00222 (J)
8/25/2020	0.0193				0.0298			
8/26/2020		<0.000203	0.00599	0.00547		0.0191	0.0231	
3/16/2021	0.0184							0.00136
3/22/2021						0.0183		
3/23/2021		0.00037	0.000388	0.00378				
3/24/2021					0.0316		0.0268	
10/5/2021	0.0169			0.00448		0.016	0.0238	0.00116
10/11/2021		0.00089			0.0165			
10/12/2021			0.00027					
Mean	0.02049	0.0003098	0.001878	0.004664	0.03151	0.02166	0.0254	0.001738
Std. Dev.	0.003859	0.0002416	0.003052	0.0009986	0.008175	0.003689	0.002167	0.0007658
Upper Lim.	0.02458	0.00089	0.00756	0.005722	0.04018	0.02557	0.0277	0.00233
Lower Lim.	0.0164	0.000203	0.000203	0.003605	0.02285	0.01775	0.0231	0.000203

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
10/22/2018					<0.000203			
10/23/2018	<0.000203	<0.000203	<0.000203	<0.000203			<0.000203	<0.000203
12/3/2018	<0.000203				<0.000203		0.00227 (J)	<0.000203
12/4/2018		<0.000203	<0.000203					
12/5/2018				<0.000203				
2/5/2019	<0.000203				<0.000203			
2/6/2019		<0.000203	0.00232 (J)	<0.000203				
2/7/2019							<0.000203	<0.000203
8/20/2019	<0.000203				<0.000203			
8/21/2019		<0.000203	0.00303 (J)	<0.000203			0.00225 (J)	<0.000203
4/13/2020	<0.000203				<0.000203	0.00489 (J)		
4/14/2020			0.00385 (J)	<0.000203				
4/15/2020		<0.000203					<0.000203	<0.000203
8/24/2020					<0.000203	0.00237 (J)	<0.000203	<0.000203
8/26/2020	<0.000203	<0.000203	0.00388 (J)	<0.000203				
3/16/2021							0.000384	0.000108 (J)
3/17/2021	0.00102					0.00616		
3/23/2021		0.00102	0.003	0.00103				
3/24/2021					<0.000203			
10/5/2021	0.00104	0.00018 (J)			0.00044	0.00287		
10/12/2021			0.00298	0.00113			8E-05 (J)	0.00014 (J)
Mean	0.0004098	0.0003023	0.002433	0.0004223	0.0002326	0.004073	0.0007245	0.0001833
Std. Dev.	0.0003829	0.0002901	0.001466	0.0004069	8.379E-05	0.001767	0.0009513	3.756E-05
Upper Lim.	0.00104	0.00102	0.003677	0.00113	0.00044	0.008085	0.00227	0.000203
Lower Lim.	0.000203	0.00018	0.001444	0.000203	0.000203	6.002E-05	8E-05	0.000108

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
10/22/2018	0.691	0.36 (U)			0.996	0.749	1.06	
10/23/2018			1.3	0.796				1.01
12/3/2018						0.749	0.697	
12/4/2018	0.213 (U)	0.407 (U)	1.05		0.739			
12/5/2018				0.498 (U)				0.876
2/5/2019	0.637				1.09	0.299 (U)	0.467 (U)	0.551 (U)
2/6/2019		0.537	0.779	-0.0241 (U)				
8/20/2019					0.553 (U)	0.709 (U)	0.814	0.206 (U)
8/21/2019	0.643 (U)							
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)				
4/13/2020						0.942 (U)		1.19
4/14/2020			0.922 (U)	0.643 (U)				
4/15/2020	0.538 (U)	0.64 (U)			0.182 (U)		-0.0841 (U)	
8/24/2020								0.482 (U)
8/25/2020	0.502 (U)				0.43 (U)			
8/26/2020		0.221 (U)	1.28	1.31		0.177 (U)	0.26 (U)	
3/16/2021	0.722 (U)							0.709 (U)
3/22/2021						0.263 (U)		
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)				
3/24/2021					0.769 (U)		0.664 (U)	
10/5/2021	1.21			1.48		3.21	1.75	1.44
10/11/2021		6.52			2.38			
10/12/2021			1.02 (U)					
Mean	0.6445	1.187	1.035	0.6766	0.8924	0.8873	0.7035	0.808
Std. Dev.	0.2792	2.17	0.2668	0.5182	0.6692	0.9789	0.5489	0.4027
Upper Lim.	0.9405	2.742	1.318	1.226	1.54	1.65	1.285	1.235
Lower Lim.	0.3485	0.0046	0.7526	0.1273	0.2978	0.1921	0.1217	0.3811

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
10/22/2018					0.621			
10/23/2018	0.243 (U)	0.703	0.319 (U)	0.395 (U)			0.383 (U)	0.352 (U)
12/3/2018	0.304 (U)				0.188 (U)		0.736	0.238 (U)
12/4/2018		0.325 (U)	0.875					
12/5/2018				0.52 (U)				
2/5/2019	0.196 (U)				0.274 (U)			
2/6/2019		0.0774 (U)	0.378 (U)	0.244 (U)				
2/7/2019							0.0202 (U)	0.395 (U)
8/20/2019	-0.086 (U)				0.663			
8/21/2019		-0.0134 (U)	0.552 (U)	1.53 (U)			0.442 (U)	-0.00256 (U)
4/13/2020	0.0901 (U)				-0.129 (U)	0.472 (U)		
4/14/2020			0.641 (U)	0.119 (U)				
4/15/2020		0.526 (U)					0.432 (U)	0.000738 (U)
8/24/2020					0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)
8/26/2020	0.416 (U)	0.691 (U)	0.339 (U)	1.18				
3/16/2021							0.32 (U)	0.589 (U)
3/17/2021	0.539 (U)					0.756 (U)		
3/23/2021		0.45 (U)	0.662 (U)	0.694 (U)				
3/24/2021					0.245 (U)			
10/5/2021	1.36	1.27			2.07	1.13		
10/12/2021			0.291 (U)	0.311 (U)			0.963 (U)	1.57
Mean	0.3828	0.5036	0.5071	0.6241	0.5136	0.5887	0.4688	0.4433
Std. Dev.	0.4386	0.4047	0.2092	0.4922	0.678	0.4778	0.28	0.4985
Upper Lim.	1.36	0.9326	0.7288	1.146	2.07	1.673	0.7655	1.116
Lower Lim.	-0.086	0.07467	0.2854	0.1025	-0.129	-0.496	0.172	0.003433

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
12/3/2018							0.22	
12/4/2018	0.04 (J)	0.07 (J)	<0.1		0.15			
12/5/2018				<0.1				0.04 (J)
2/5/2019	0.0525 (J)				0.207	0.064 (J)	0.259	0.0651 (J)
2/6/2019		0.107	0.0678 (J)	<0.1				
2/25/2019						<0.1		
2/26/2019	<0.1	0.0813 (J)			0.264		0.246	
2/27/2019			0.0985 (J)	<0.1				0.0578 (J)
6/18/2019						0.0664 (J)		
8/20/2019					0.252	0.0592 (J)	0.197	0.0567 (J)
8/21/2019	<0.1							
8/22/2019		0.084 (J)	<0.1	<0.1				
4/13/2020						<0.1		0.0688 (J)
4/14/2020			0.0878 (J)	<0.1				
4/15/2020	<0.1	0.112			0.21		0.238	
8/24/2020								0.0607 (J)
8/25/2020	<0.1				0.273			
8/26/2020		0.0997 (J)	<0.1	<0.1		<0.1	0.251	
3/16/2021	<0.1							0.065 (J)
3/22/2021						<0.1		
3/23/2021		0.101	0.0819 (J)	<0.1				
3/24/2021					0.194		0.227	
10/5/2021	0.0601 (J)			<0.1		<0.1	0.214	0.122
10/11/2021		0.201			0.283			
10/12/2021			0.134					
Mean	0.08158	0.107	0.09625	0.1	0.2291	0.0862	0.2315	0.06701
Std. Dev.	0.026	0.04055	0.01912	0	0.04616	0.01915	0.02083	0.02389
Upper Lim.	0.1	0.1425	0.1109	0.1	0.2781	0.1	0.2536	0.0889
Lower Lim.	0.04	0.07281	0.06956	0.1	0.1802	0.0592	0.2094	0.04612

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-5	GSD-AP-PZ-6
12/3/2018	<0.1				0.08 (J)	<0.1	<0.1
12/4/2018		0.06 (J)	0.08 (J)				
12/5/2018				0.04 (J)			
2/5/2019	0.0581 (J)				0.0934 (J)		
2/6/2019		<0.1	<0.1	<0.1			
2/7/2019						<0.1	<0.1
2/25/2019					<0.1	<0.1	<0.1
2/26/2019	0.0816 (J)						
2/27/2019		0.0824 (J)	0.108	0.147			
8/20/2019	<0.1				0.0889 (J)		
8/21/2019		0.068 (J)	0.0648 (J)	0.0984 (J)		<0.1	<0.1
4/13/2020	<0.1				0.103		
4/14/2020			0.0845 (J)	0.133			
4/15/2020		0.0775 (J)				<0.1	<0.1
8/24/2020					0.114	<0.1	<0.1
8/26/2020	<0.1	<0.1	0.0732 (J)	0.13			
3/16/2021						<0.1	<0.1
3/17/2021	<0.1						
3/23/2021		<0.1	0.0802 (J)	0.132			
3/24/2021					0.0725 (J)		
10/5/2021	<0.1	0.0933 (J)			<0.1		
10/12/2021			0.123	0.147		<0.1	<0.1
Mean	0.09246	0.08515	0.08921	0.1159	0.09398	0.1	0.1
Std. Dev.	0.0153	0.01568	0.01946	0.03587	0.0133	0	0
Upper Lim.	0.1	0.08844	0.1098	0.148	0.1038	0.1	0.1
Lower Lim.	0.0581	0.06404	0.06858	0.08501	0.07601	0.1	0.1

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
10/22/2018	<0.0002			
10/23/2018			<0.0002	<0.0002
12/3/2018			<0.0002	<0.0002
12/4/2018	<0.0002			
2/5/2019	<0.0002			
2/7/2019			<0.0002	<0.0002
8/20/2019	<0.0002			
8/21/2019			<0.0002	<0.0002
4/13/2020		<0.0002		
4/15/2020	<0.0002		<0.0002	<0.0002
8/24/2020		<0.0002	<0.0002	<0.0002
8/25/2020	<0.0002			
3/16/2021			0.00013 (J)	8.35E-05 (J)
3/17/2021		0.000191 (J)		
3/24/2021	<0.0002			
10/5/2021		0.00012 (J)		
10/11/2021	9E-05 (J)			
10/12/2021			<0.0002	0.00012 (J)
Mean	0.0001862	0.0001777	0.0001912	0.0001754
Std. Dev.	3.889E-05	3.873E-05	2.475E-05	4.652E-05
Upper Lim.	0.0002	0.0002	0.0002	0.0002
Lower Lim.	9E-05	0.00012	0.00013	8.35E-05

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2
10/22/2018	0.0804
12/4/2018	0.0474
2/5/2019	0.0545
8/20/2019	0.0583
4/15/2020	0.0406
8/25/2020	0.041
3/24/2021	0.0318
10/11/2021	0.0225
Mean	0.04706
Std. Dev.	0.01776
Upper Lim.	0.06589
Lower Lim.	0.02824

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-7	GSD-AP-MW-8
10/22/2018	<0.0005		
10/23/2018		<0.0005	<0.0005
12/4/2018	0.000302 (J)	0.00034 (J)	0.000284 (J)
2/6/2019	<0.0005	<0.0005	<0.0005
8/21/2019		<0.0005	<0.0005
8/22/2019	<0.0005		
4/14/2020			<0.0005
4/15/2020	<0.0005	<0.0005	
8/26/2020	<0.0005	<0.0005	<0.0005
3/23/2021	<0.0005	<0.0005	<0.0005
10/5/2021		<0.0005	
10/11/2021	<0.0005		
10/12/2021			<0.0005
Mean	0.0004753	0.00048	0.000473
Std. Dev.	7E-05	5.657E-05	7.637E-05
Upper Lim.	0.0005	0.0005	0.0005
Lower Lim.	0.000302	0.00034	0.000284

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
10/22/2018	<0.000203		0.0198	<0.000203				
10/23/2018		<0.000203			<0.000203	<0.000203	<0.000203	<0.000203
12/3/2018				<0.000203				
12/4/2018	<0.000203	<0.000203	0.0118			<0.000203	<0.000203	
12/5/2018					<0.000203			<0.000203
2/5/2019			0.0196	<0.000203	<0.000203			
2/6/2019	<0.000203	<0.000203				<0.000203	<0.000203	<0.000203
8/20/2019			0.027	<0.000203	<0.000203			
8/21/2019						<0.000203	<0.000203	<0.000203
8/22/2019	<0.000203	<0.000203						
4/13/2020					<0.000203			
4/14/2020		<0.000203					<0.000203	<0.000203
4/15/2020	<0.000203		0.0202	<0.000203		<0.000203		
8/24/2020					<0.000203			
8/25/2020			0.0269					
8/26/2020	<0.000203	<0.000203		<0.000203		<0.000203	<0.000203	<0.000203
3/16/2021					<0.000203			
3/23/2021	0.000204	0.000124 (J)				<0.000203	0.000357	0.00027
3/24/2021			0.0164	0.00118				
10/5/2021				0.00111	0.00015 (J)	0.0001 (J)		
10/11/2021	0.00045		0.0204					
10/12/2021		0.00015 (J)					0.00032	0.00018 (J)
Mean	0.000234	0.0001865	0.02026	0.0004385	0.0001964	0.0001901	0.0002369	0.0002085
Std. Dev.	8.728E-05	3.133E-05	0.005024	0.0004365	1.874E-05	3.642E-05	6.35E-05	2.612E-05
Upper Lim.	0.00045	0.000203	0.02559	0.00118	0.000203	0.000203	0.000357	0.00027
Lower Lim.	0.000203	0.000124	0.01494	0.000203	0.00015	0.0001	0.000203	0.00018

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2
10/22/2018	<0.000203	
12/3/2018	<0.000203	
2/5/2019	<0.000203	
8/20/2019	<0.000203	
4/13/2020	<0.000203	<0.000203
8/24/2020	<0.000203	<0.000203
3/17/2021		<0.000203
3/24/2021	9.88E-05 (J)	
10/5/2021	7E-05 (J)	0.00028
Mean	0.0001734	0.0002223
Std. Dev.	5.544E-05	3.85E-05
Upper Lim.	0.000203	0.00028
Lower Lim.	7E-05	0.000203

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 1/11/2022 3:53 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-3
10/22/2018	<0.0002	0.000213 (J)	
12/3/2018			<0.0002
12/4/2018	<0.0002	<0.0002	
2/5/2019	<0.0002	0.000256 (J)	<0.0002
6/18/2019			<0.0002
8/20/2019		0.000322 (J)	<0.0002
8/21/2019	<0.0002		
4/13/2020			<0.0002
4/15/2020	<0.0002	0.000318 (J)	
8/25/2020	<0.0002	0.000347 (J)	
8/26/2020			<0.0002
3/16/2021	0.000112 (J)		
3/22/2021			0.000121 (J)
3/24/2021		0.00037	
10/5/2021	<0.0002		0.00014 (J)
10/11/2021		0.00029	
Mean	0.000189	0.0002895	0.0001826
Std. Dev.	3.111E-05	6.169E-05	3.257E-05
Upper Lim.	0.0002	0.0003549	0.0002
Lower Lim.	0.000112	0.0002241	0.000121

GROUNDWATER STATS CONSULTING

July 18, 2022

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gadsden Ash Pond
2nd 2021 Semi-Annual Analysis – May 2022

Dear Mr. Dyer,

Groundwater Stats Consulting, formerly the statistical consulting division of Sanitas Technologies, is pleased to provide the statistical analysis of groundwater data for the May 2022 2nd 2021 semi-annual sample event for Alabama Power Company's Plant Gadsden Ash Pond. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals from Electric Utilities (CCR Rule, 2015) and follows the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began for the Coal Combustion Residuals (CCR) program in December 2017, and at least 8 background samples have been collected at each of the groundwater monitoring wells.

The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** GSD-AP-MW-14, GSD-AP-MW-16, and GSD-AP-MW-17
- **Downgradient wells:** GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, and GSD-AP-PZ-6
- **Delineation wells:** GSD-AP-MW-2VA, GSD-AP-MW-2VB, GSD-AP-MW-4V, GSD-AP-MW-18H, GSD-AP-MW-19H, GSD-AP-MW-20H, GSD-AP-MW-21VC, and GSD-AP-MW-22VB
- **Piezometers:** GSD-AP-MW-2V

Note that delineation wells did not require statistics; therefore, data for these wells were plotted only on time series and box plots. Downgradient well GSD-AP-PZ-2 has recently been converted from a piezometer to a downgradient well. Since this well has been sampled at least 4 times, data from this well are evaluated with confidence intervals for Appendix IV constituents. Prediction limits will be used to evaluate Appendix III constituents when a minimum of 8 samples are available.

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was reviewed by Andrew Collins, Project Manager of Groundwater Stats Consulting.

The CCR program consists of the following constituents:

> **Appendix III** (Detection Monitoring) – boron, calcium, chloride, fluoride, pH, sulfate, and TDS
> **Appendix IV** (Assessment Monitoring) – antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, combined radium 226 + 228, fluoride, lead, lithium, mercury, molybdenum, selenium, and thallium

Note that when there are no detections present in downgradient wells for a given constituent, statistical analyses are not required. A list of Appendix IV downgradient well/constituent pairs containing 100% non-detects follows this letter.

Time series plots for Appendix III and IV parameters at all wells are provided for the purpose of screening data at these wells (Figure A). A substitution of the most recent reporting limit is used for non-detect data. Additionally, a separate section of box plots is included for all constituents at upgradient and downgradient wells (Figure B). The time series plots are used to initially screen for suspected outliers and trends, while the box plots provide visual representation of variation within individual wells and between all wells.

In earlier analyses, data at all wells were evaluated for the following: 1) outliers; 2) trends; 3) most appropriate statistical method for Appendix III parameters based on analysis of the spatial variability of groundwater quality data among wells upgradient of the facility; and 4) eligibility of downgradient wells when intrawell statistical methods are recommended. Power curves are provided in this report to demonstrate that the selected statistical methods for Appendix III parameters comply with the USEPA Unified Guidance. The EPA suggests that the selected statistical method should provide at least 55% power at 3 standard deviations or at least 80% power at 4 standard deviations. Power curves are based on the following statistical methods and site/data characteristics:

- Semi-Annual Sampling
- Intrawell Prediction Limits with 1-of-2 resample plan
- Interwell Prediction Limits with 1-of-2 resample plan
- # Background Samples (Intrawell): 13
- # Background Samples (Interwell): 46
- # Constituents: 7
- # Downgradient wells: 15

Note that previous analyses utilized a 1-of-3 resample plan for parameters that use intrawell statistical methods; however, during this analysis, power curves demonstrate that the increased number of samples in background provide sufficient power using the 1-of-2 resample plan.

Summary of Statistical Methods – Appendix III Parameters

Based on the earlier evaluation described above, the following statistical methods were selected:

- Intrawell prediction limits, combined with a 1-of-2 resample plan for fluoride and pH
- Interwell prediction limits, combined with a 1-of-2 resample plan for boron, calcium, chloride, sulfate, and TDS

Parametric prediction limits are utilized when the screened historical data follow a normal or transformed-normal distribution. When data cannot be normalized or the majority of data are non-detects, a nonparametric test is utilized. While the annual false positive rate associated with parametric limits is fixed at 10% as recommended by the EPA Unified Guidance (2009), the false positive rate associated with nonparametric limits is not fixed and depends upon the available background sample size, number of future comparisons, and verification resample plan. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA, 2009), data are analyzed using either parametric or non-parametric prediction limits as appropriate.

- No statistical analyses are required on wells and analytes containing 100% non-detects (USEPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% non-detects in background, simple substitution of one-half the reporting limit is utilized in the statistical analysis. The reporting limit utilized for non-detects is the most recent practical quantification limit (PQL) as reported by the laboratory.

- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

Natural systems continuously evolve due to physical changes made to the environment. Examples include capping a landfill, paving areas near a well, or lining a drainage channel to prevent erosion. Periodic updating of background statistical limits is necessary to accommodate these types of changes. In the intrawell case, data for all wells and constituents may be re-evaluated when a minimum of 4 new samples are available to determine whether earlier concentrations are representative of present-day groundwater quality. In the interwell case, prediction limits are updated with upgradient well data following each sampling event after careful screening for any new outliers. While not required for this report, in some cases, deselecting the earlier portion of data may be necessary prior to construction of limits so that resulting statistical limits are conservative (lower) from a regulatory perspective and capable of rapidly detecting changes in groundwater quality. Even though the data are excluded from the calculation, the values will continue to be reported and shown in tables and graphs.

Summary of Background Screening – Conducted in April 2019

Outlier Analysis

Time series plots were used to identify suspected outliers, or extreme values that would result in limits that are not representative of the current background data population. Suspected outliers at all wells for Appendix III and Appendix IV parameters were formally tested using Tukey's box plot method and, when identified, flagged in the computer database with "o" and deselected prior to construction of statistical limits.

Using the Tukey box plot method, two outliers were identified. A summary of those findings was included with the 2019 background screening. While this is not the case in the present data set, when the most recent value is identified as an outlier, values are not flagged in the database at this time as they may represent a possible trend. If future values do not remain at similar concentrations, these values will be flagged as outliers and deselected. Several low values exist in the data sets and appear on the graphs as possible low outliers relative to the laboratory's Practical Quantitation Limit. However, these values are observed trace values (i.e., measurements reported by the laboratory between the

Method Detection Limit and the Practical Quantitation Limit) and, therefore, were not flagged as outliers.

Of the outliers identified by Tukey's method, only one value was flagged as an outlier in the database since the other value was similar to remaining measurements within the same well and neighboring wells. When any values are flagged in the database as outliers, they are plotted in a disconnected and lighter symbol on the time series graph. The accompanying data pages display the flagged value in a lighter font as well. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

Seasonality

No obvious seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

Trend Testing

While trends may be identified by visual inspection, a quantification of the trend and its significance is needed. The Sen's Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. In the absence of suspected contamination, significant trending data are typically not included as part of the background data used for construction of prediction limits. This step serves to eliminate the trend and, thus, reduce variation in background. When statistically significant decreasing trends are present, all available data are evaluated to determine whether earlier concentration levels are significantly different than current reported concentrations and will be deselected as necessary. When any records of data are truncated for the reasons above, a summary report will be provided to show the date ranges used in construction of the statistical limits.

The results of the trend analyses showed several statistically significant decreasing and increasing trends for the Appendix III parameters and were included with the 2019 background screening. Most of the trends noted were relatively low in magnitude when compared to average concentrations, and the background time period is short with less than two years of record, making it difficult to separate trends from normal year-to-year variation; therefore, no adjustments were made to the data sets. If the observed

decreasing or increasing trends persist over a longer time frame, some records may need to be truncated.

Appendix III – Evaluation of Statistical Approaches

The Analysis of Variance (ANOVA) was used to statistically evaluate differences in average concentrations among upgradient wells, which assists in identifying the most appropriate statistical approach. Interwell tests, which compare downgradient well data to statistical limits constructed from pooled upgradient well data, are appropriate when average concentrations are similar across upgradient wells. Intrawell tests, which compare compliance data from a single well to screened historical data within the same well, are appropriate when upgradient wells exhibit spatial variation; when statistical limits constructed from upgradient wells are not representative of the current background data population; and when downgradient water quality is unimpacted compared to upgradient water quality for the same parameter.

Based on the results of the 2019 background screening for Appendix III parameters, intrawell methods were recommended for fluoride and pH, and interwell methods were recommended for boron, calcium, chloride, sulfate, and TDS. If further evaluation confirms natural variation in groundwater, intrawell methods will be considered for parameters currently recommended for interwell methods.

Background Update – Fall 2021

Outlier Analysis

Prior to performing prediction limits, proposed background data through March 2021 were reviewed through visual screening to identify any newly suspected outliers at all wells for fluoride and pH and at upgradient wells for boron, calcium, chloride, sulfate, and TDS. When identified as outliers, values were flagged with "o" and excluded to reduce variation, better represent background conditions, and provide limits that are conservative from a regulatory perspective. No suspected outliers were identified for Appendix III parameters. As mentioned above, flagged data are displayed in a lighter font and as a disconnected symbol on the time series reports, as well as in a lighter font on the accompanying data pages.

Mann-Whitney Test of Medians

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through February 7, 2019,

to compliance data through March 2021. When the medians of the two groups are not statistically significantly different at the 99% confidence level, background data sets are updated to include the newer compliance data. Statistically significant differences (either an increase or decrease in median concentrations) were found between the two groups for the following well/constituent pairs:

Increase:

- Fluoride: GSD-AP-MW-1

Decrease:

- pH: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11

Typically, when the test concludes that the medians of the two groups are statistically significantly different, particularly in the downgradient wells, the background data are not updated to include the newer data unless it can be reasonably justified that the change in concentrations reflects a naturally occurring shift unrelated to practices at the site. In studies such as the current one, in which at least one of the segments being compared is of short duration, the comparison is complicated by the fact that normal short-term variation may be mistaken for long-term change in medians.

While a statistically significant increase in median concentrations was identified for fluoride in well GSD-AP-MW-1, this record was updated with more recent data because the compliance data contained 100% non-detects. Although statistically significant decreases in median concentrations were identified for pH in wells GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-PZ-5, GSD-AP-MW-7, GSD-AP-MW-8, and GSD-AP-MW-11, the magnitude of the decreases were marginal compared to the historical concentrations. Therefore, all of the records with statistically significant Mann-Whitney results for CCR Appendix III constituents that use intrawell methods were updated.

All records will be re-evaluated during the next background update and if future concentrations are similar to those observed currently, the earlier portion of the records may require deselection so only more recent data are used to construct statistical limits which are reflective of present-day water quality conditions. If, however, concentrations return to historical lower levels, more recent higher measurements may be flagged as outliers and deselected prior to construction of statistical limits.

Trend Tests – Upgradient Wells

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data from upgradient wells for parameters utilizing interwell prediction limits. When

statistically significant increasing trends are identified in upgradient wells, the earlier portion of data may require deselection prior to construction of interwell statistical limits if the trending data would result in statistical limits that are not conservative from a regulatory perspective. The following upgradient well/constituent pairs were found to have statistically significant trends:

Increasing
- None

Decreasing
- Chloride: GSD-AP-MW-17

The slope for chloride at well GSD-AP-MW-17 is influenced by several similar and slightly higher values earlier in the record, but the median slope for the overall record was small relative to average concentrations at these wells and reported measurements were similar across all upgradient wells. Therefore, no adjustments were required.

Evaluation of Appendix III Parameters – May 2022

Intrawell limits constructed from carefully screened background data from within each well serve to provide statistical limits that are representative of the background data population, and that will rapidly identify a change in more recent compliance data from within a given well. The most recent sample from the same well is compared to its respective background. This statistical method removes the element of variation from across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. Background data are re-evaluated when a minimum of 4 compliance samples are available.

Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for fluoride and pH using screened background data through March 2021 at each well (Figure D). The May 2022 sample at each well was compared to its respective intrawell prediction limit. Note that during this event, the reporting limit for fluoride increased from 0.1 mg/L to 0.125 mg/L, which resulted in slight changes in prediction limits for GSD-AP-MW-12, GSD-AP-MW-16, GSD-AP-MW-6, GSD-AP-PZ-5, and GSD-AP-PZ-6.

These changes did not result in any additional exceedances. Values in background which have been flagged as outliers may be seen in a lighter font and as a disconnected symbol on the graphs, and a summary of all flagged outliers follows this report (Figure C).

Interwell prediction limits combined with a 1-of-2 verification strategy were constructed for boron, calcium, chloride, sulfate, and TDS (Figure E).

In the event of an initial exceedance of compliance well data, the 1-of-2 resample plan allows for collection of one additional sample to determine whether the initial exceedance is confirmed. When the resample confirms the initial exceedance, a statistically significant increase (SSI) is identified, and further research is required to identify the cause of the exceedance (i.e., impact from the site, natural variation, or an off-site source). If a resample falls within the statistical limit, the initial exceedance is considered to be a false positive result; therefore, no further action is necessary. A summary of the prediction limits results may be found in the Prediction Limit Summary tables following this letter. The following exceedances were noted for the intrawell and interwell prediction limits:

Intrawell

- pH: GSD-AP-MW-2, GSD-AP-MW-5, GSD-AP-MW-7, and GSD-AP-MW-12

Interwell

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, and GSD-AP-MW-11
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-5, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, and GSD-AP-MW-12
- Chloride: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, and GSD-AP-PZ-5
- Sulfate: GSD-AP-MW-1 and GSD-AP-MW-3
- TDS: GSD-AP-MW-1, GSD-AP-MW-3, GSD-AP-MW-11, and GSD-AP-MW-12

Trend Tests

When prediction limit exceedances are identified in downgradient wells, data are further evaluated using the Sen's Slope/Mann Kendall trend test to determine whether concentrations are statistically increasing, decreasing, or stable (Figure F). Upgradient

wells are included in the trend analyses for all parameters found to exceed their prediction limit in downgradient wells to identify whether similar patterns exist upgradient of the site. The existence of similar trends in both upgradient and downgradient wells is an indication of natural variability in groundwater that is unrelated to practices at the site. A summary of the trend test results follows this letter. Statistically significant trends were identified for the following well/constituent pairs:

Increasing:

- Calcium: GSD-AP-MW-11
- TDS: GSD-AP-MW-11

Decreasing:

- Boron: GSD-AP-MW-1, GSD-AP-MW-2, GSD-AP-MW-4, and GSD-AP-MW-5
- Calcium: GSD-AP-MW-1, GSD-AP-MW-2, and GSD-AP-MW-3
- Chloride: GSD-AP-MW-17 (upgradient) and GSD-AP-MW-3
- pH: GSD-AP-MW-16 (upgradient) and GSD-AP-MW-7
- TDS: GSD-AP-MW-1 and GSD-AP-MW-3

Evaluation of Appendix IV Parameters – May 2022

Data from all wells for Appendix IV parameters are reassessed for outliers during each analysis and no new values were flagged as outliers. A summary of previously flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management (ADEM), the Groundwater Protections Standards (GWPS) were updated during the 2021 1st semi-annual statistical analysis. The GWPS will be updated again during the 2023 1st semi-annual statistical analysis. The methodology used to create these GWPS is described below.

Interwell Upper Tolerance Limits

First, background limits were determined using tolerance limits constructed from pooled upgradient well data through October 2021 (Figure G). The tolerance limits contain a known fraction (coverage) of the background population with a known level of confidence. The confidence and coverage levels for nonparametric tolerance limits are dependent upon the number of background samples. As requested by ADEM to eliminate variation among upgradient well data, nonparametric tolerance limits, which use the highest value in background as the statistical limit, were constructed.

Groundwater Protection Standards

These background limits were then compared to the Maximum Contaminant Levels (MCLs) for each parameter, and the higher of the two was used as the GWPS (Figure H) in the confidence interval comparisons described below.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through May 2022 for each of the Appendix IV parameters (Figure I). These intervals were constructed as either parametric or nonparametric confidence intervals depending on the data distribution and percentage of non-detects. When data followed a normal or transformed-normal distribution, parametric confidence intervals were used for Appendix IV parameters. Nonparametric confidence intervals, which use the highest and lowest values in background as interval limits, were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects.

As mentioned above, well/constituent pairs containing 100% non-detects did not require statistics and were, therefore, deselected prior to construction confidence intervals. A list of deselected well/constituent pairs also follows this report. Each confidence interval was compared with the corresponding GWPS. Only when the entire confidence interval is above the GWPS is the well/constituent pair considered to exceed its respective standard. Both a tabular summary and graphical presentation of the confidence interval results follow this letter. No exceedances were noted for any of the well/constituent pairs.

- Arsenic: GSD-AP-MW-2 and GSD-AP-MW-4

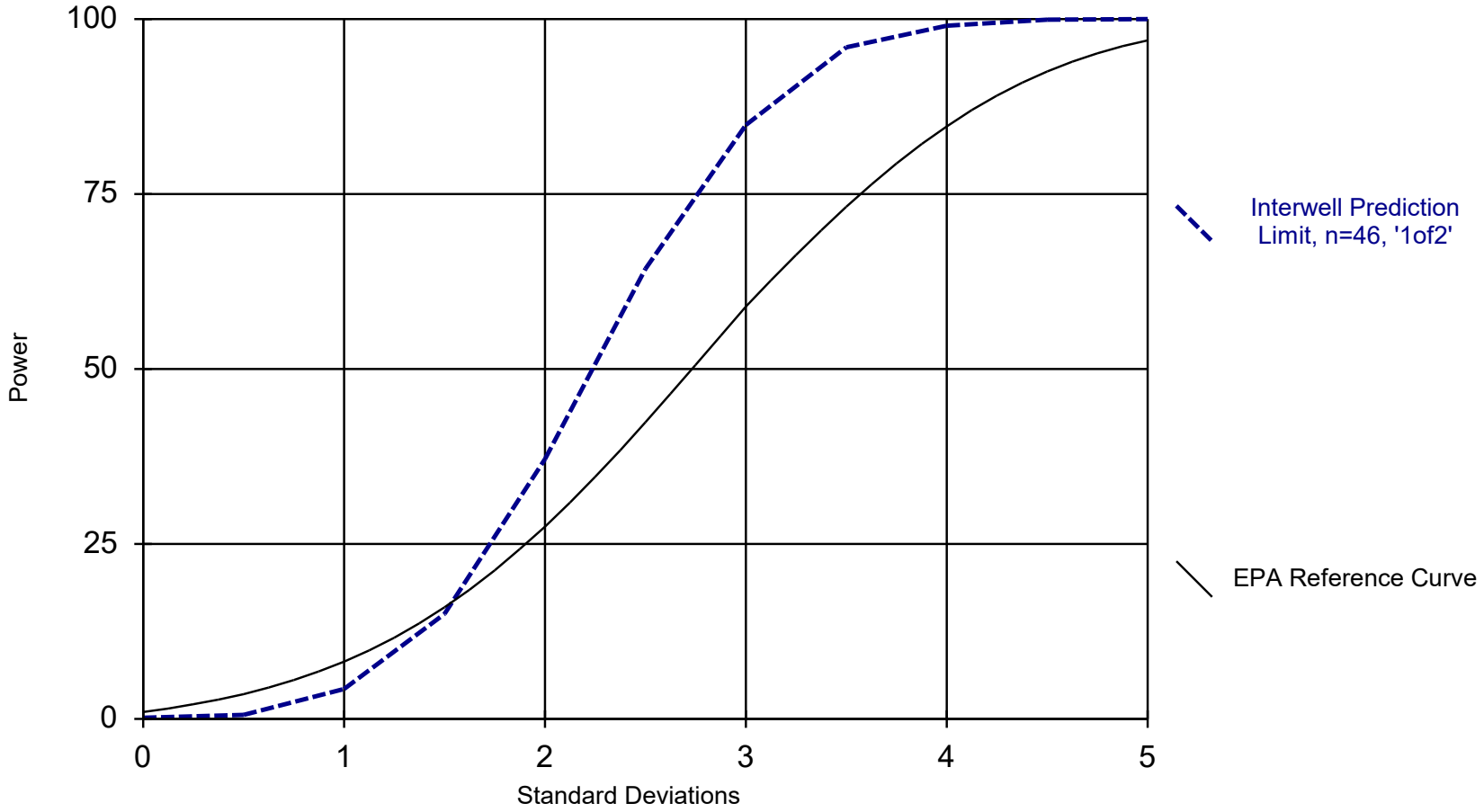
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Plant Gadsden Ash Pond. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Abdul Diane
Groundwater Analyst

Andrew T. Collins
Project Manager

Interwell Power Curve

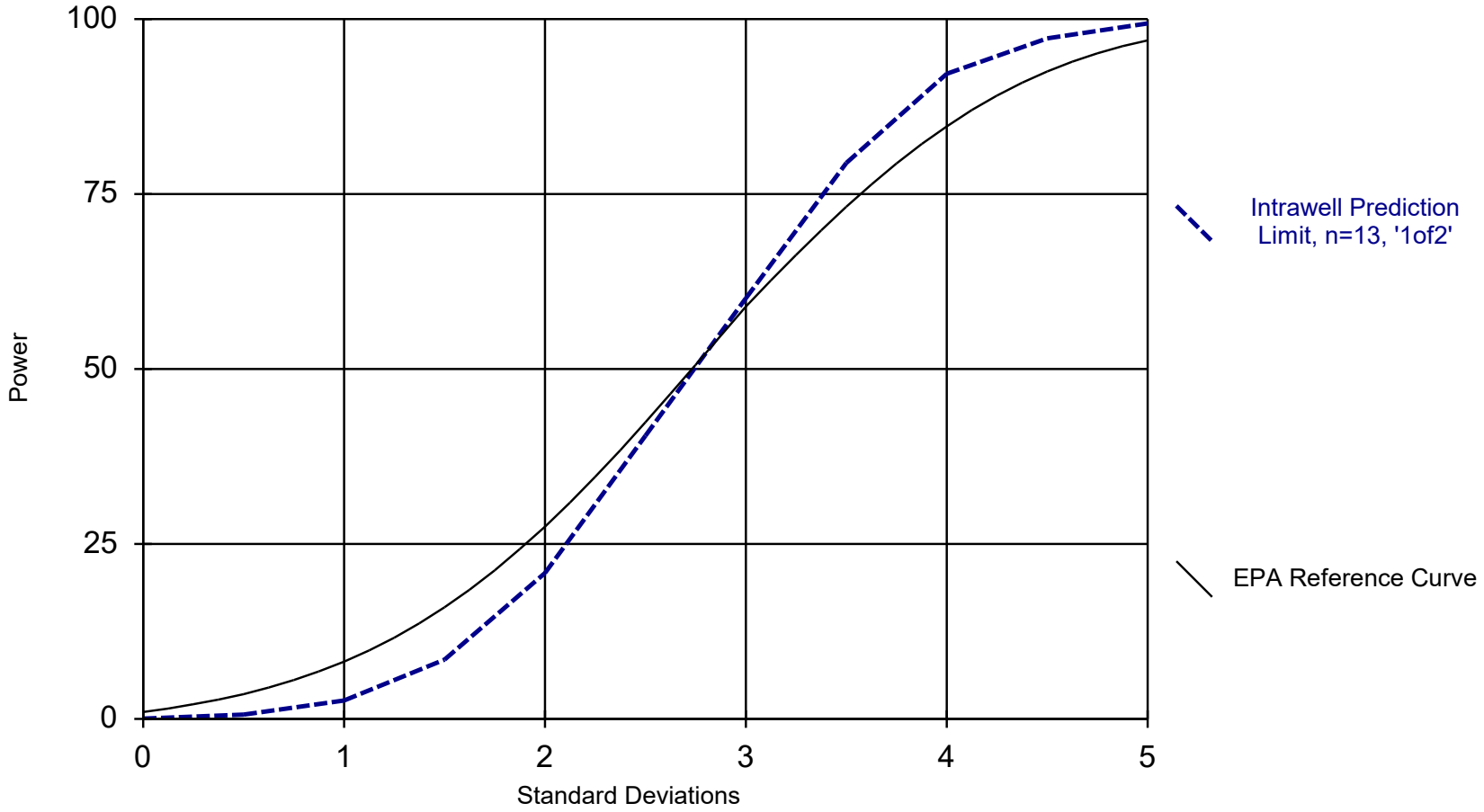


Kappa = 2.151, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 7/18/2022 2:42 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Intrawell Power Curve



Kappa = 2.711, based on 15 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 7/18/2022 2:42 PM

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

100% Non-Detects: Appendix IV Downgradient

Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Antimony (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2

Arsenic (mg/L)
GSD-AP-MW-12, GSD-AP-MW-6, GSD-AP-PZ-1, GSD-AP-PZ-6

Beryllium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Cadmium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-6

Fluoride (mg/L)
GSD-AP-PZ-2

Lead (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1

Lithium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Mercury (mg/L)
GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5

Molybdenum (mg/L)
GSD-AP-MW-1, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-6, GSD-AP-PZ-5, GSD-AP-PZ-6

Selenium (mg/L)
GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Thallium (mg/L)
GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-4, GSD-AP-MW-5, GSD-AP-MW-6, GSD-AP-MW-7, GSD-AP-MW-8, GSD-AP-MW-9, GSD-AP-PZ-1, GSD-AP-PZ-2, GSD-AP-PZ-5, GSD-AP-PZ-6

Interwell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	0.1015	n/a	5/10/2022	0.954	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-11	0.1015	n/a	5/17/2022	0.139	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-2	0.1015	n/a	5/16/2022	0.381	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-3	0.1015	n/a	5/10/2022	0.998	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-4	0.1015	n/a	5/16/2022	0.342	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-5	0.1015	n/a	5/9/2022	0.261	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GSD-AP-MW-1	32.65	n/a	5/10/2022	166	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-10	32.65	n/a	5/10/2022	42.2	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-11	32.65	n/a	5/17/2022	80.6	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-12	32.65	n/a	5/10/2022	48.2	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-2	32.65	n/a	5/16/2022	58.2	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-3	32.65	n/a	5/10/2022	58.5	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-5	32.65	n/a	5/9/2022	38.4	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-8	32.65	n/a	5/11/2022	61.9	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-9	32.65	n/a	5/11/2022	36.9	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-1	4.063	n/a	5/10/2022	5.97	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-10	4.063	n/a	5/10/2022	5.72	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-11	4.063	n/a	5/17/2022	5.92	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-12	4.063	n/a	5/10/2022	5.64	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-3	4.063	n/a	5/10/2022	4.59	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-4	4.063	n/a	5/16/2022	8.07	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-5	4.063	n/a	5/9/2022	6.81	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-6	4.063	n/a	5/10/2022	8.87	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-8	4.063	n/a	5/11/2022	5.13	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-9	4.063	n/a	5/11/2022	7.2	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-5	4.063	n/a	5/10/2022	4.12	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	GSD-AP-MW-1	207	n/a	5/10/2022	508	Yes	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-3	207	n/a	5/10/2022	215	Yes	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	277.7	n/a	5/10/2022	780	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	277.7	n/a	5/17/2022	367	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	277.7	n/a	5/10/2022	319	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	277.7	n/a	5/10/2022	362	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**0.1015**	**n/a**	**5/10/2022**	**0.954**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-10	0.1015	n/a	5/10/2022	0.097J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-11**	**0.1015**	**n/a**	**5/17/2022**	**0.139**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-12	0.1015	n/a	5/10/2022	0.066J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-2**	**0.1015**	**n/a**	**5/16/2022**	**0.381**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-3**	**0.1015**	**n/a**	**5/10/2022**	**0.998**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-4**	**0.1015**	**n/a**	**5/16/2022**	**0.342**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-5**	**0.1015**	**n/a**	**5/9/2022**	**0.261**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-6	0.1015	n/a	5/10/2022	0.0681J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-7	0.1015	n/a	5/10/2022	0.0465J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-8	0.1015	n/a	5/11/2022	0.037J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-9	0.1015	n/a	5/11/2022	0.0636J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-1	0.1015	n/a	5/9/2022	0.1015ND	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-5	0.1015	n/a	5/10/2022	0.1015ND	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-6	0.1015	n/a	5/10/2022	0.1015ND	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GSD-AP-MW-1**	**32.65**	**n/a**	**5/10/2022**	**166**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-10**	**32.65**	**n/a**	**5/10/2022**	**42.2**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-11**	**32.65**	**n/a**	**5/17/2022**	**80.6**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-12**	**32.65**	**n/a**	**5/10/2022**	**48.2**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-2**	**32.65**	**n/a**	**5/16/2022**	**58.2**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-3**	**32.65**	**n/a**	**5/10/2022**	**58.5**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-4	32.65	n/a	5/16/2022	30.7	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-5**	**32.65**	**n/a**	**5/9/2022**	**38.4**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-6	32.65	n/a	5/10/2022	10.8	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-7	32.65	n/a	5/10/2022	9.95	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-8**	**32.65**	**n/a**	**5/11/2022**	**61.9**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-9**	**32.65**	**n/a**	**5/11/2022**	**36.9**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-PZ-1	32.65	n/a	5/9/2022	18.9	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-5	32.65	n/a	5/10/2022	2.87	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-6	32.65	n/a	5/10/2022	3.24	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-1**	**4.063**	**n/a**	**5/10/2022**	**5.97**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-10**	**4.063**	**n/a**	**5/10/2022**	**5.72**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-11**	**4.063**	**n/a**	**5/17/2022**	**5.92**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-12**	**4.063**	**n/a**	**5/10/2022**	**5.64**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-2	4.063	n/a	5/16/2022	2.18	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-3**	**4.063**	**n/a**	**5/10/2022**	**4.59**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-4**	**4.063**	**n/a**	**5/16/2022**	**8.07**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-5**	**4.063**	**n/a**	**5/9/2022**	**6.81**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-6**	**4.063**	**n/a**	**5/10/2022**	**8.87**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-7	4.063	n/a	5/10/2022	3.96	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-8**	**4.063**	**n/a**	**5/11/2022**	**5.13**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-9**	**4.063**	**n/a**	**5/11/2022**	**7.2**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-1	4.063	n/a	5/9/2022	3.46	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-PZ-5**	**4.063**	**n/a**	**5/10/2022**	**4.12**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-6	4.063	n/a	5/10/2022	3.68	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-1**	**207**	**n/a**	**5/10/2022**	**508**	**Yes**	**46**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008648**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-10	207	n/a	5/10/2022	11.6	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-11	207	n/a	5/17/2022	145	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-12	207	n/a	5/10/2022	193	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-2	207	n/a	5/16/2022	93.1	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-3**	**207**	**n/a**	**5/10/2022**	**215**	**Yes**	**46**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008648**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-4	207	n/a	5/16/2022	51.8	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-5	207	n/a	5/9/2022	15.5	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-6	207	n/a	5/10/2022	14.8	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-7	207	n/a	5/10/2022	7.13	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-8	207	n/a	5/11/2022	11.8	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-9	207	n/a	5/11/2022	17.7	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-1	207	n/a	5/9/2022	2.51	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-5	207	n/a	5/10/2022	1.02J	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-6	207	n/a	5/10/2022	1.28J	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**277.7**	**n/a**	**5/10/2022**	**780**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-10	277.7	n/a	5/10/2022	199	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**277.7**	**n/a**	**5/17/2022**	**367**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-12**	**277.7**	**n/a**	**5/10/2022**	**319**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	277.7	n/a	5/16/2022	244	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**277.7**	**n/a**	**5/10/2022**	**362**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-4	277.7	n/a	5/16/2022	218	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-5	277.7	n/a	5/9/2022	174	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GSD-AP-MW-6	277.7	n/a	5/10/2022	73.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-7	277.7	n/a	5/10/2022	82.7	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-8	277.7	n/a	5/11/2022	216	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-9	277.7	n/a	5/11/2022	181	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-1	277.7	n/a	5/9/2022	85.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-5	277.7	n/a	5/10/2022	33.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-6	277.7	n/a	5/10/2022	33.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2

Intrawell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**5/10/2022**	**4.78**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-2**	**6.801**	**6.273**	**5/16/2022**	**6.16**	**Yes**	**13**	**6.537**	**0.09742**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**5/9/2022**	**5.43**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-7**	**6.847**	**5.694**	**5/10/2022**	**5.08**	**Yes**	**13**	**6.271**	**0.2126**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	5/10/2022	0.125ND	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-10	0.1381	n/a	5/10/2022	0.0918J	No	13	0.08731	0.01872	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-11	0.1122	n/a	5/17/2022	0.125ND	No	13	0.0646	0.01756	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-12	0.125	n/a	5/10/2022	0.125ND	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	5/9/2022	0.125ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.1599	n/a	5/17/2022	0.125ND	No	14	0.1026	0.02163	50	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	5/9/2022	0.191	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	5/16/2022	0.264	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1327	n/a	5/10/2022	0.0714J	No	14	0.07516	0.0217	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	5/16/2022	0.17	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-5	0.08126	n/a	5/9/2022	0.0682J	No	13	0.05878	0.008293	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-6	0.09393	n/a	5/10/2022	0.125ND	No	13	0.3704	0.03104	38.46	Kaplan-Meier	x^(1/3)	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-7	0.109	n/a	5/10/2022	0.0627J	No	13	0.0755	0.01236	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-8	0.149	n/a	5/11/2022	0.0695J	No	13	0.09544	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1665	n/a	5/11/2022	0.108J	No	13	0.01415	0.005005	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1606	n/a	5/9/2022	0.0824J	No	13	0.1071	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	n/a	5/10/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	n/a	5/10/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	5/10/2022	5.77	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	5/10/2022	6.39	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-11	7.012	6.206	5/17/2022	6.44	No	13	6.609	0.1486	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**5/10/2022**	**4.78**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-14	4.1	3.25	5/9/2022	3.6	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	5/17/2022	4.34	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	5/9/2022	7.29	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-2**	**6.801**	**6.273**	**5/16/2022**	**6.16**	**Yes**	**13**	**6.537**	**0.09742**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-3	6.88	5.224	5/10/2022	5.95	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	5/16/2022	6.61	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**5/9/2022**	**5.43**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-6	6.703	5.385	5/10/2022	5.51	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-7**	**6.847**	**5.694**	**5/10/2022**	**5.08**	**Yes**	**13**	**6.271**	**0.2126**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-8	7.032	6.084	5/11/2022	6.25	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	5/11/2022	6.7	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	5/9/2022	6.03	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	5/10/2022	5.38	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-6	5.699	5.348	5/10/2022	5.57	No	13	5.523	0.06473	0	None	No	0.0002508	Param Intra 1 of 2

Appendix III - Trend Tests - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06646**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.04879**	**-80**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0618**	**-79**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.98**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-11**	**2.65**	**58**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-2**	**-13.48**	**-66**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-9.451**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.3088**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.704**	**-107**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.363**	**-76**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-7**	**-0.1581**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-87.67**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.7**	**57**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-41.2**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Trend Tests - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06646**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-11	0.007821	48	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.009899	50	58	No	16	62.5	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.0009955	-29	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-3	0.04351	50	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-4**	**-0.04879**	**-80**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0618**	**-79**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.98**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	0.334	15	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**2.65**	**58**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	1.352	5	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-0.5428	-12	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.1677	-3	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.487	31	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-13.48**	**-66**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-9.451**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-5	-1.382	-29	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	-0.3419	-3	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.1864	1	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	0	2	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	0	2	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	0.009156	4	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	0.01565	3	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.02005	9	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.005781	-4	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.3088**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.704**	**-107**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	0.0704	9	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.2493	-46	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-6	-0.1995	-44	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.1165	22	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.1961	33	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-PZ-5	0.0557	23	53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-12	-0.06835	-32	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-14 (bg)	-0.03724	-30	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.363**	**-76**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.2684	-24	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-2	-0.05984	-44	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-5	-0.03416	-26	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-7**	**-0.1581**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GSD-AP-MW-1	-12.74	-16	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-0.307	-2	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	26.51	53	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-0.882	-50	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-3	-0.5782	-5	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-87.67**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.7**	**57**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	-9.733	-10	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-6.186	-7	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	27.91	48	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-4.419	-26	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-41.2**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00108	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0563	0.0563
Combined Radium-226/228	pCi/L	1.589	5
Fluoride	mg/L	0.2363	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

Appendix IV - Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 2:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7782**	**0.4808**	**0.01**	**Yes**	**8**	**0.1403**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01415**	**0.0111**	**0.01**	**Yes**	**8**	**0.001435**	**0**	**No**	**0.01**	**Param.**

Appendix IV - Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 2:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-PZ-5	0.00114	0.00102	0.006	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-6	0.00181	0.00102	0.006	No	8	0.0002793	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.004526	0.002702	0.01	No	8	0.0008606	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004175	0.002352	0.01	No	8	0.0008598	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002853	0.002474	0.01	No	8	0.0001916	0	x^3	0.01	Param.
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7782**	**0.4808**	**0.01**	**Yes**	**8**	**0.1403**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.00021	0.00016	0.01	No	8	0.00001506	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01415**	**0.0111**	**0.01**	**Yes**	**8**	**0.001435**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.0002	0.00008	0.01	No	8	0.00005531	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.0002	0.00007	0.01	No	8	0.00004596	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003246	0.002869	0.01	No	8	0.0001777	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.0009783	0.0001992	0.01	No	8	0.0003929	37.5	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-PZ-2	0.0002	0.0000826	0.01	No	5	0.00006009	40	No	0.031	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.0002	0.0000808	0.01	No	8	0.00004214	87.5	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.04168	0.02932	2	No	8	0.005829	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3604	0.2768	2	No	8	0.03942	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.331	0.165	2	No	8	0.06289	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-MW-12	0.04863	0.03134	2	No	8	0.008156	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.08753	0.05167	2	No	8	0.01691	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.03892	0.03193	2	No	8	0.003295	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-4	0.2151	0.1644	2	No	8	0.02395	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2439	0.2189	2	No	8	0.01177	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07677	0.06023	2	No	8	0.007799	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08639	0.05768	2	No	8	0.01354	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.2805	0.189	2	No	8	0.04318	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1947	0.1425	2	No	8	0.02465	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.08592	0.05158	2	No	8	0.0162	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1498	0.02519	2	No	5	0.03718	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.126	0.0494	2	No	8	0.02643	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.03128	0.02897	2	No	8	0.001093	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.00022	0.0001	0.005	No	8	0.00004787	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-12	0.0006833	0.0003534	0.005	No	8	0.0001556	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.0002	0.0000688	0.005	No	8	0.00004639	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.000438	0.0002	0.005	No	8	0.0001015	50	No	0.004	NP (normality)
Cadmium (mg/L)	GSD-AP-MW-7	0.0002	0.000097	0.005	No	8	0.00003642	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.0002	0.00007	0.005	No	8	0.00005723	75	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.0002	0.00008	0.005	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.00102	0.00023	0.1	No	8	0.0003826	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-10	0.00102	0.00028	0.1	No	8	0.000368	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-11	0.00102	0.00027	0.1	No	8	0.0003337	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-12	0.00102	0.00034	0.1	No	8	0.0003252	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-2	0.00102	0.00034	0.1	No	8	0.0003082	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-3	0.001043	0.0001046	0.1	No	8	0.0008462	50	x^(1/3)	0.01	Param.
Chromium (mg/L)	GSD-AP-MW-4	0.00102	0.00023	0.1	No	8	0.0003451	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.00102	0.00028	0.1	No	8	0.0003266	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-6	0.00102	0.00025	0.1	No	8	0.0003369	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-7	0.00102	0.00025	0.1	No	8	0.0003747	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-8	0.00102	0.00022	0.1	No	8	0.0003525	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.00102	0.00021	0.1	No	8	0.0003698	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-1	0.00102	0.00027	0.1	No	8	0.0003477	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-2	0.0008656	0.0002904	0.1	No	5	0.0002841	40	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.00102	0.00034	0.1	No	8	0.0003182	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-6	0.00102	0.00031	0.1	No	8	0.0003244	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-1	0.02359	0.01471	0.0563	No	8	0.004189	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.00091	0.000203	0.0563	No	8	0.0003151	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-11	0.00756	0.000203	0.0563	No	8	0.003035	37.5	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-12	0.005797	0.003758	0.0563	No	8	0.000962	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-2	0.03796	0.02327	0.0563	No	8	0.00693	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02507	0.01598	0.0563	No	8	0.00429	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.02842	0.02313	0.0563	No	8	0.0025	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.002389	0.0007644	0.0563	No	8	0.0007663	12.5	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-6	0.00114	0.000203	0.0563	No	8	0.0004483	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-7	0.00102	0.00018	0.0563	No	8	0.0002889	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-8	0.004393	0.001575	0.0563	No	8	0.00133	12.5	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.00113	0.000203	0.0563	No	8	0.0004286	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.00014	0.0563	No	8	0.00008972	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.007972	0.001308	0.0563	No	5	0.001988	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00227	0.00008	0.0563	No	8	0.0009556	37.5	No	0.004	NP (normality)

Appendix IV - Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 2:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-PZ-6	0.000203	0.000108	0.0563	No	8	0.00004246	62.5	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	0.9521	0.3544	5	No	8	0.282	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	2.767	0.005055	5	No	8	2.167	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.258	0.74	5	No	8	0.2445	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.193	0.09446	5	No	8	0.518	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.555	0.3002	5	No	8	0.671	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.44	0.177	5	No	8	1.01	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.268	0.1187	5	No	8	0.542	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.268	0.3851	5	No	8	0.4167	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	1.089	0.0003213	5	No	8	0.4481	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	0.9135	0.0677	5	No	8	0.399	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.7344	0.3189	5	No	8	0.196	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.163	0.1377	5	No	8	0.4837	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	2.07	-0.129	5	No	8	0.6841	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	1.257	-0.1743	5	No	5	0.4271	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.8052	0.2014	5	No	8	0.2848	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.157	0.003799	5	No	8	0.4972	0	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.125	0.0525	4	No	8	0.03187	75	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.201	0.0813	4	No	8	0.03838	0	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-11	0.1109	0.06956	4	No	8	0.02477	37.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-12	0.125	0.125	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-2	0.2798	0.207	4	No	8	0.03433	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.125	0.0592	4	No	8	0.03088	62.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2572	0.1933	4	No	8	0.03018	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.122	0.0567	4	No	8	0.02127	0	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-6	0.125	0.0581	4	No	8	0.02629	75	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-7	0.08819	0.06546	4	No	8	0.02657	37.5	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-8	0.1167	0.06539	4	No	8	0.02418	12.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.1457	0.1094	4	No	8	0.01712	12.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1066	0.07809	4	No	8	0.01959	25	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	0.125	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	0.125	4	No	8	0	100	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-MW-2	0.0002	0.00009	0.015	No	8	0.00003889	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.000205	0.0001023	0.015	No	5	0.00003356	40	x^3	0.01	Param.
Lead (mg/L)	GSD-AP-PZ-5	0.0002	0.00013	0.015	No	8	0.00002475	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.0002	0.0000835	0.015	No	8	0.00004901	62.5	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.05393	0.02687	0.04	No	8	0.01276	0	No	0.01	Param.
Mercury (mg/L)	GSD-AP-MW-10	0.0005	0.000302	0.002	No	8	0.00007	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-7	0.0005	0.00034	0.002	No	8	0.00005657	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-8	0.0005	0.000284	0.002	No	8	0.00007637	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-PZ-6	0.00286	0.0005	0.002	No	8	0.0008344	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.00047	0.0002	0.1	No	8	0.0001202	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-11	0.0002	0.00012	0.1	No	8	0.00003659	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.02562	0.01498	0.1	No	8	0.005021	0	No	0.01	Param.
Molybdenum (mg/L)	GSD-AP-MW-4	0.00122	0.0002	0.1	No	8	0.0005029	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-5	0.0002	0.00011	0.1	No	8	0.00003412	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.0002	0.0001	0.1	No	8	0.00003536	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.0004	0.0002	0.1	No	8	0.00008503	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-9	0.00027	0.00018	0.1	No	8	0.000029	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.0002	0.00007	0.1	No	8	0.00005406	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.00028	0.0002	0.1	No	5	0.00003578	80	No	0.031	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.0002	0.000112	0.002	No	8	0.00003688	75	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.000384	0.0002442	0.002	No	8	0.00006596	12.5	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.0002	0.00011	0.002	No	8	0.00004033	62.5	No	0.004	NP (NDs)

FIGURE A.

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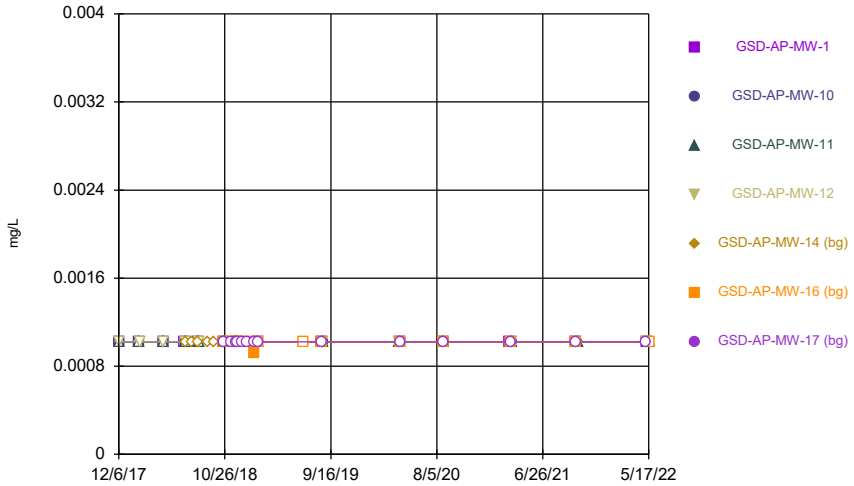

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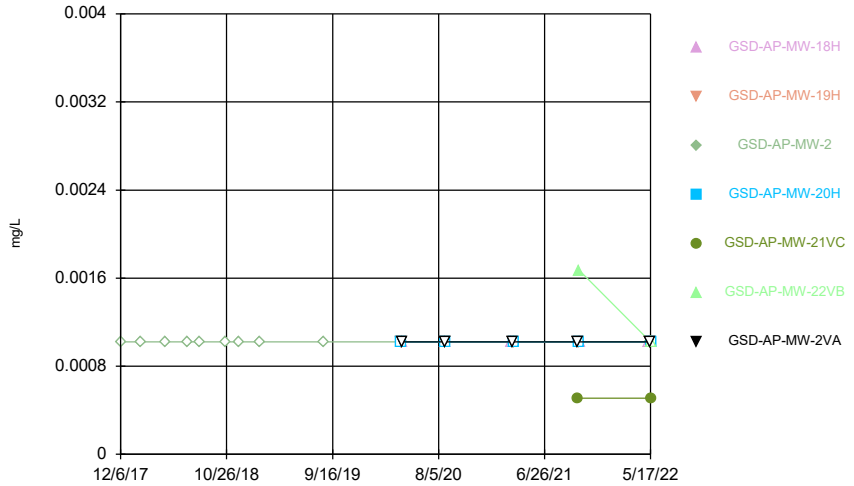

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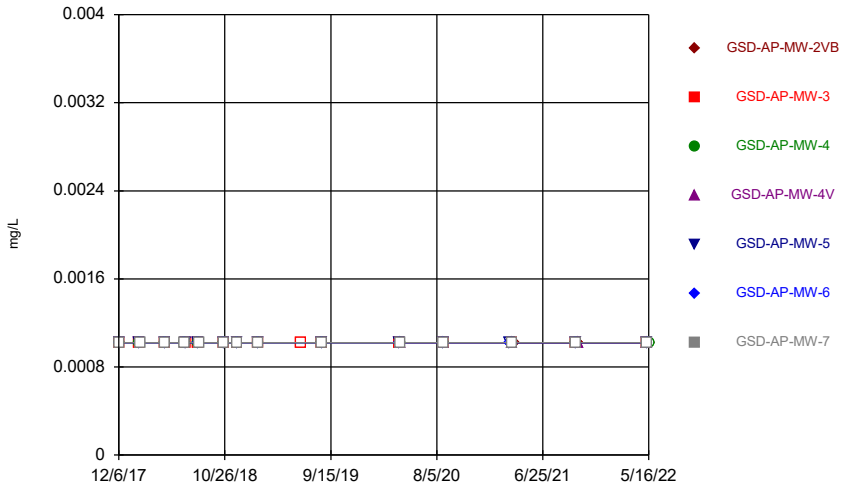

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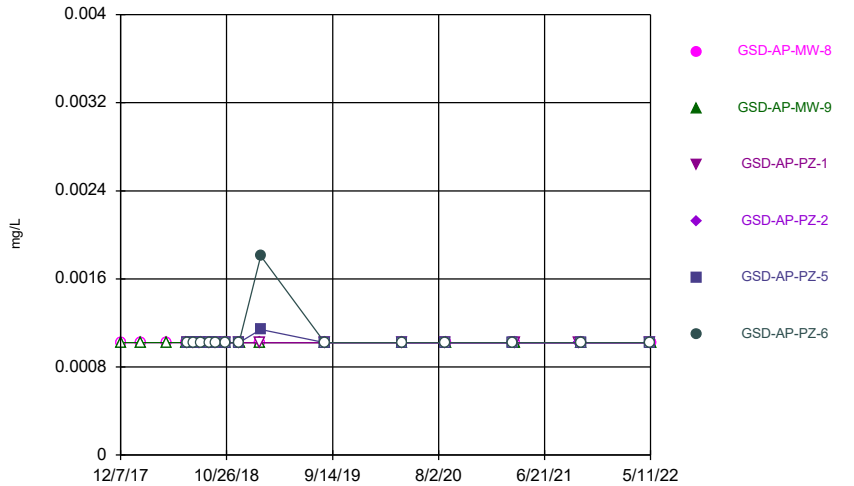

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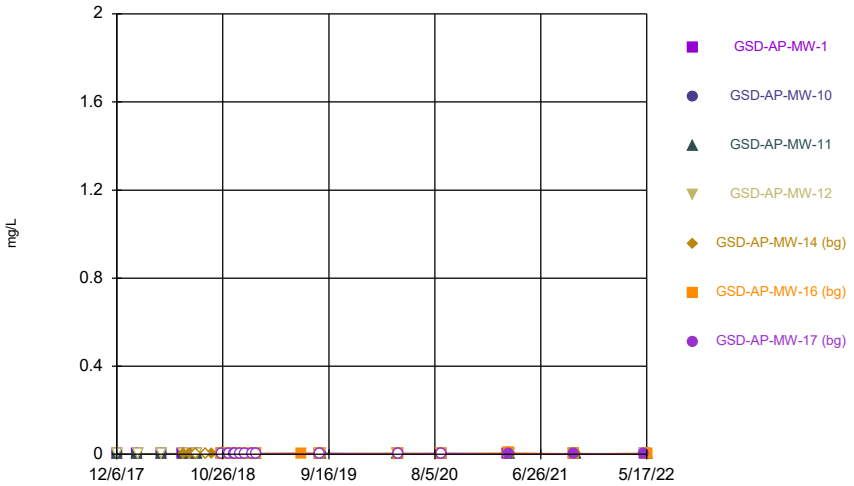

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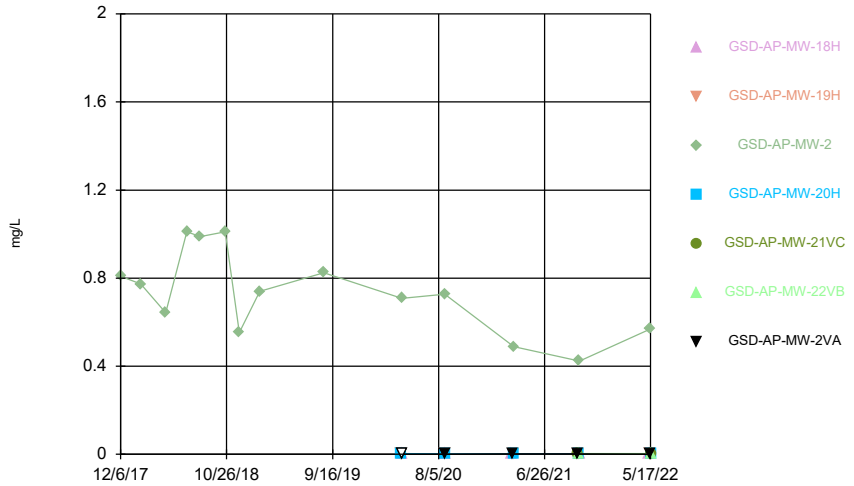

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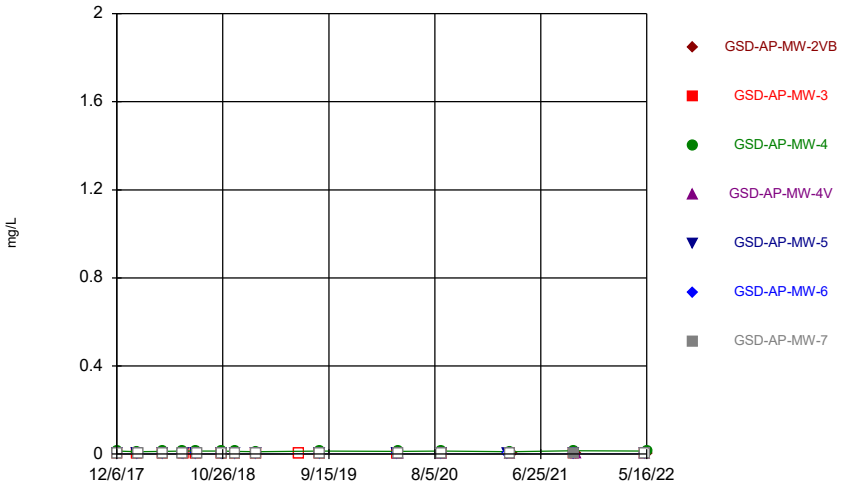

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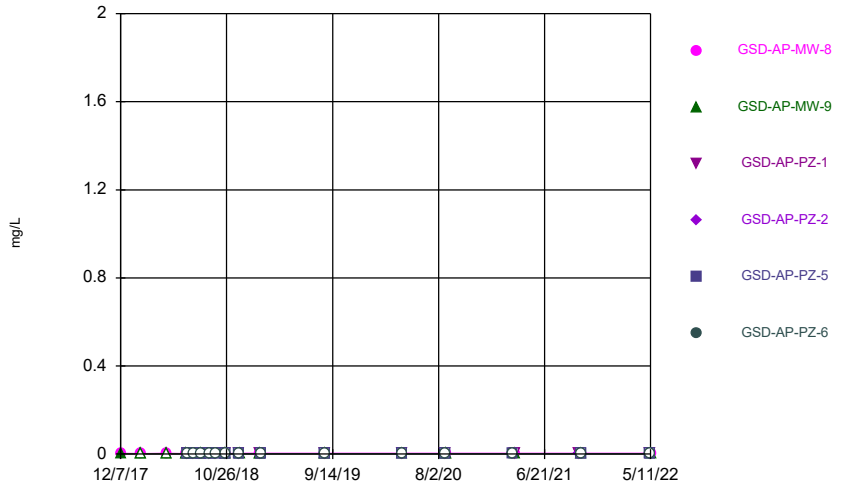

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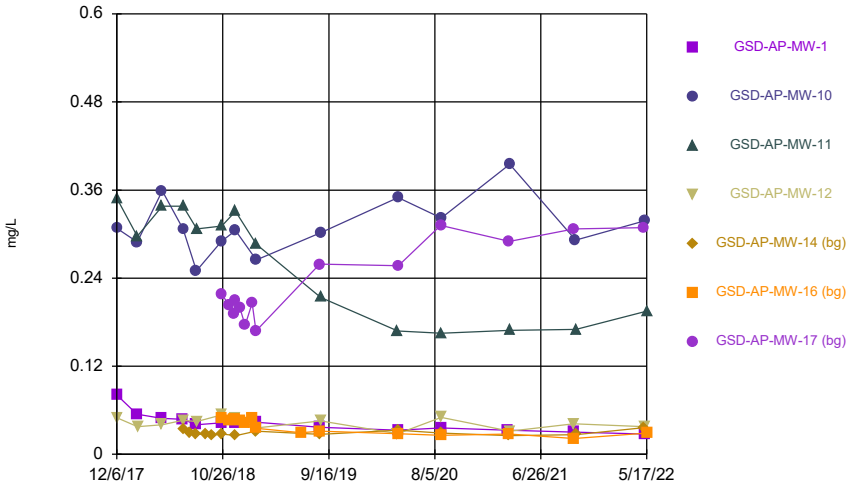

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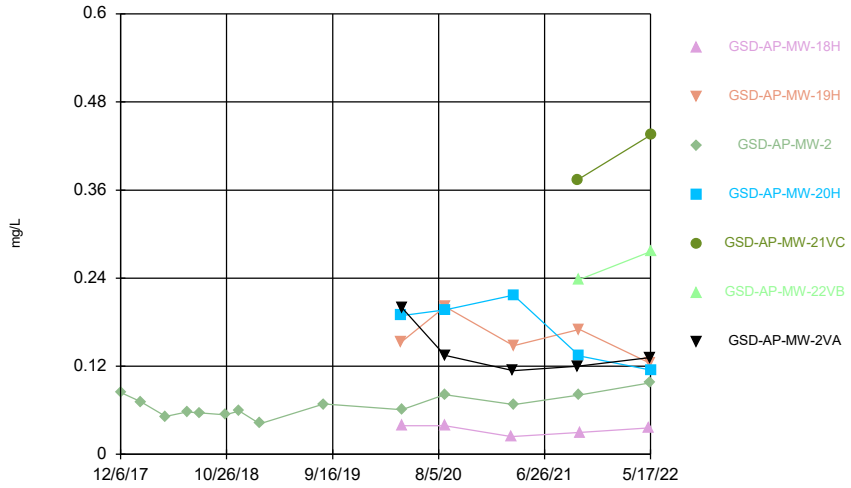

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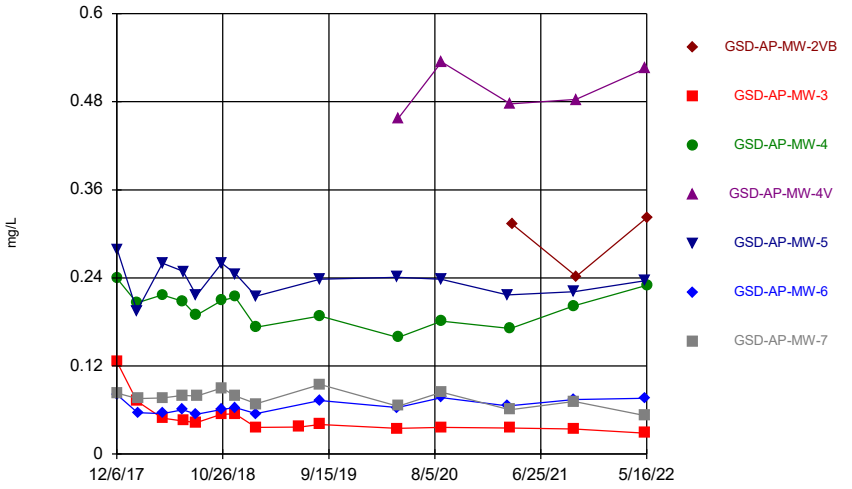

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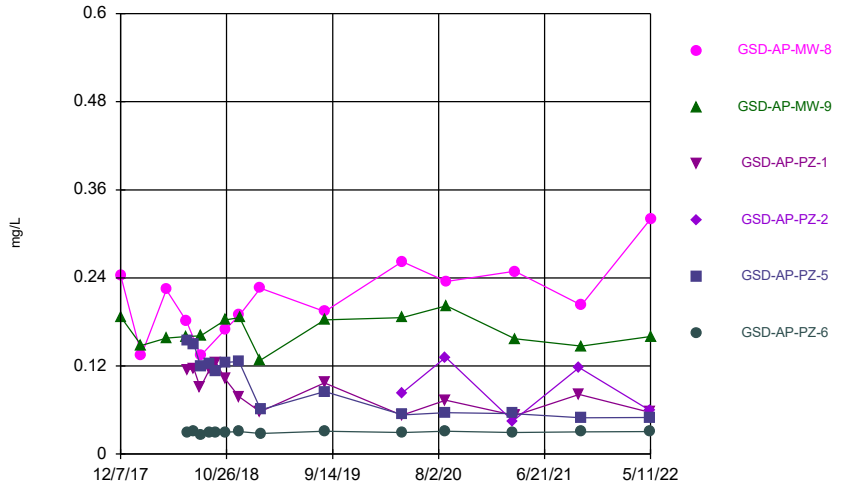

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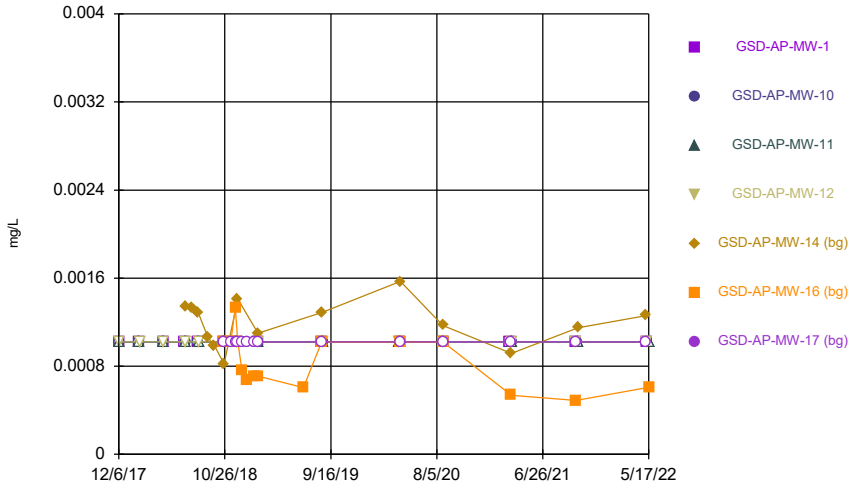
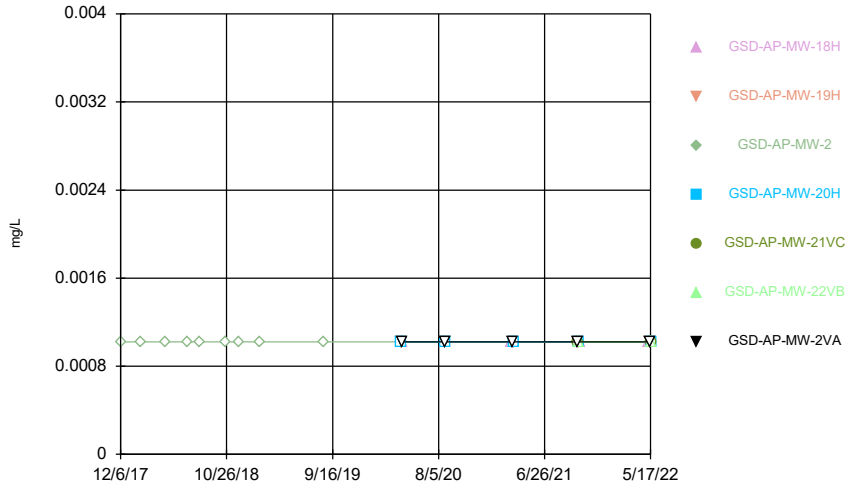
Time Series



Constituent: Beryllium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

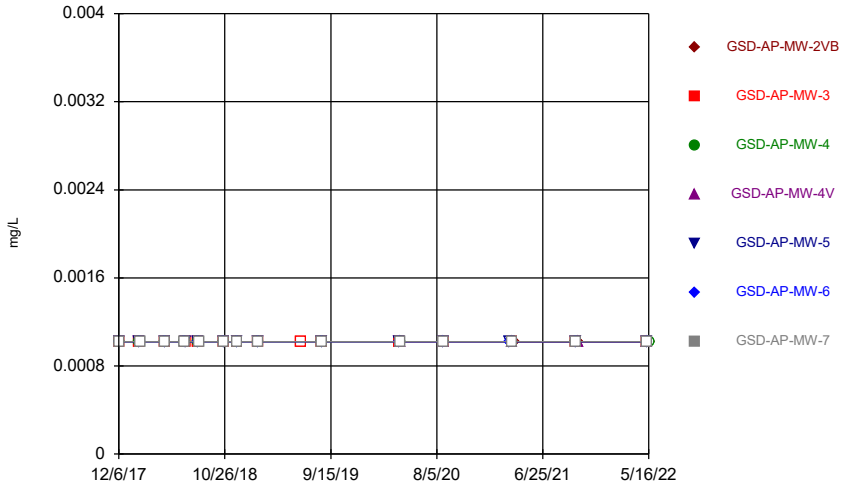
Time Series



Constituent: Beryllium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

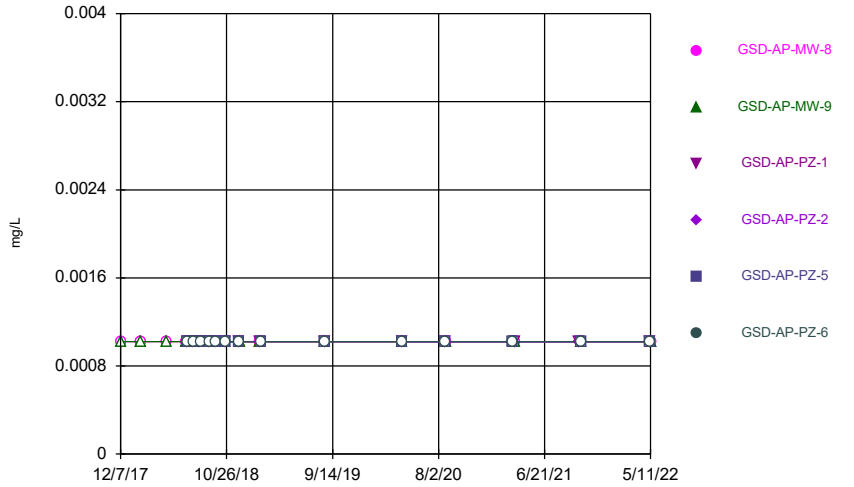
Time Series



Constituent: Beryllium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

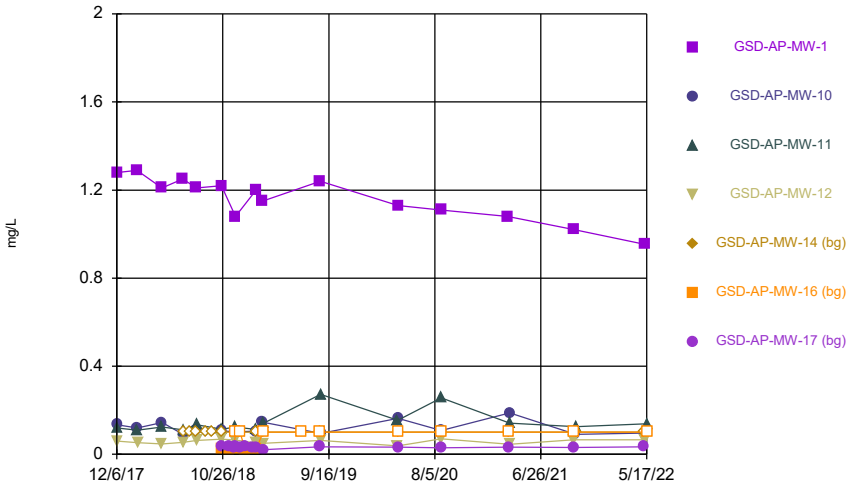
Time Series



Constituent: Beryllium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Time Series



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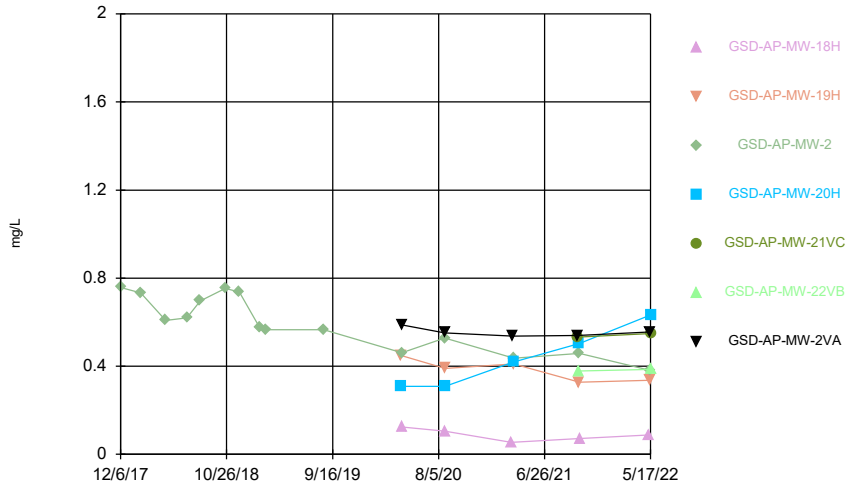
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

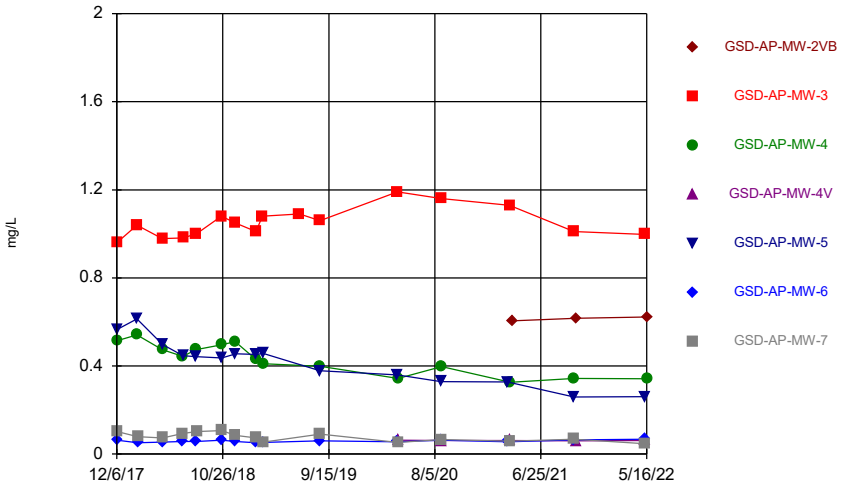
Time Series



Constituent: Boron Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

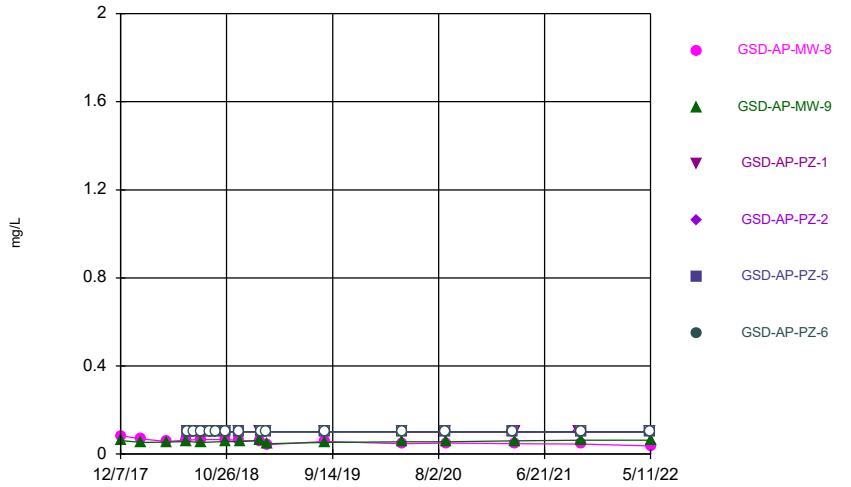
Time Series



Constituent: Boron Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

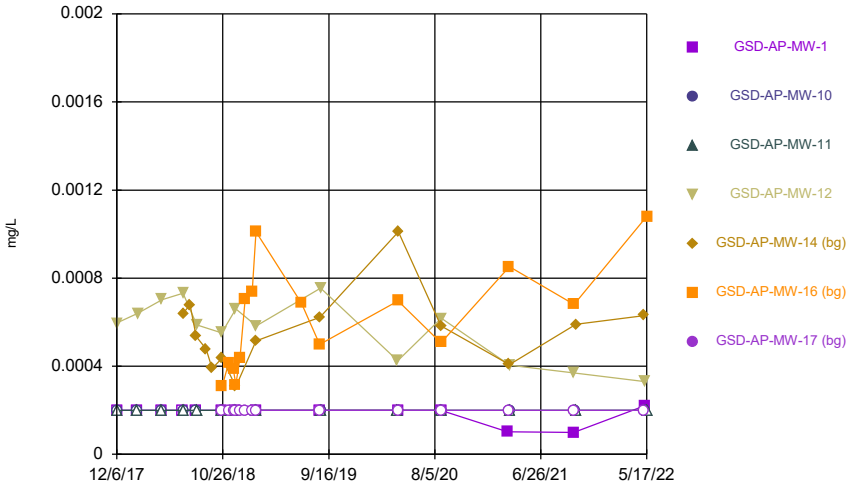
Time Series



Constituent: Boron Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

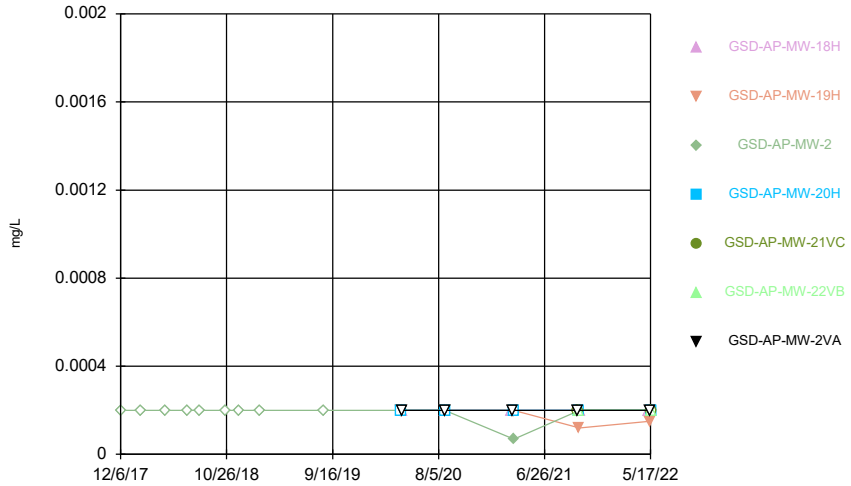
Time Series



Constituent: Cadmium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

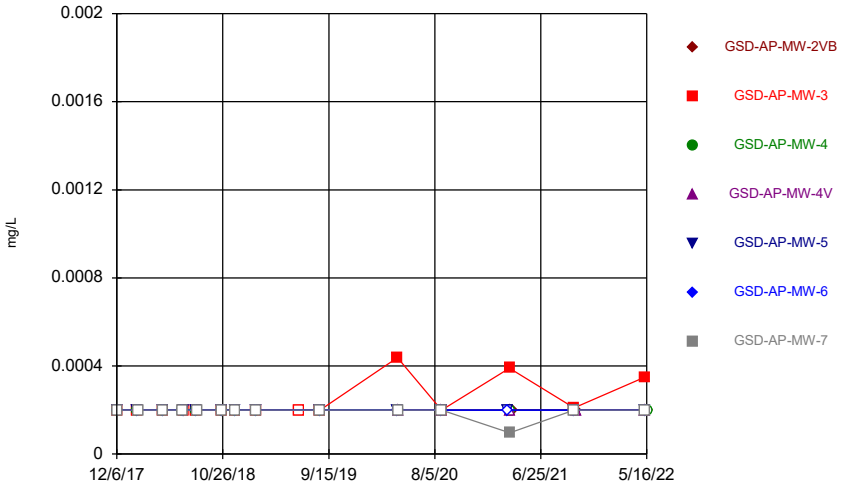
Time Series



Constituent: Cadmium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

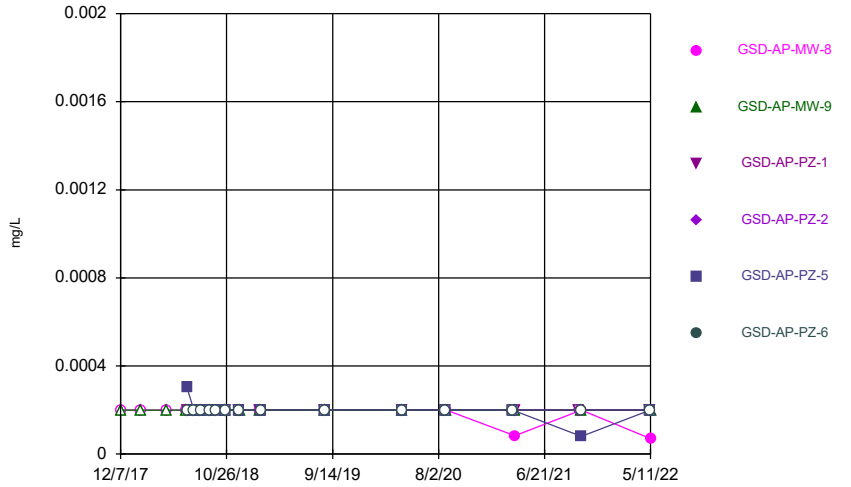
Time Series



Constituent: Cadmium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

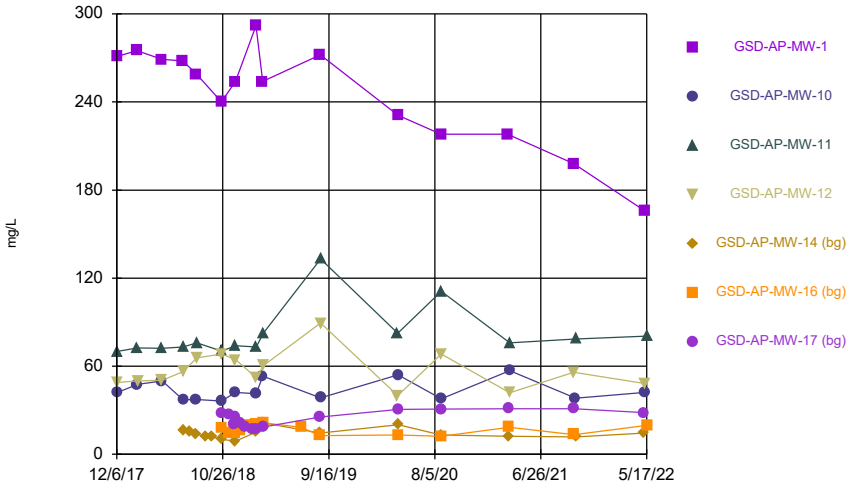
Time Series



Constituent: Cadmium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

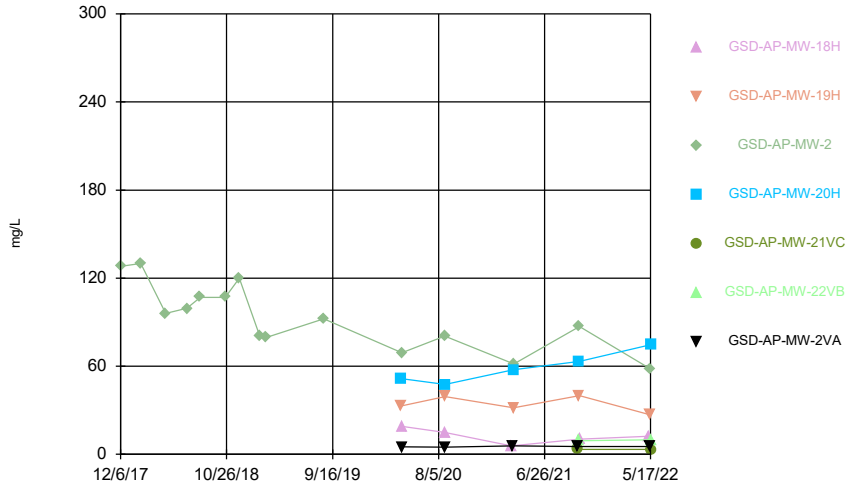
Time Series



Constituent: Calcium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

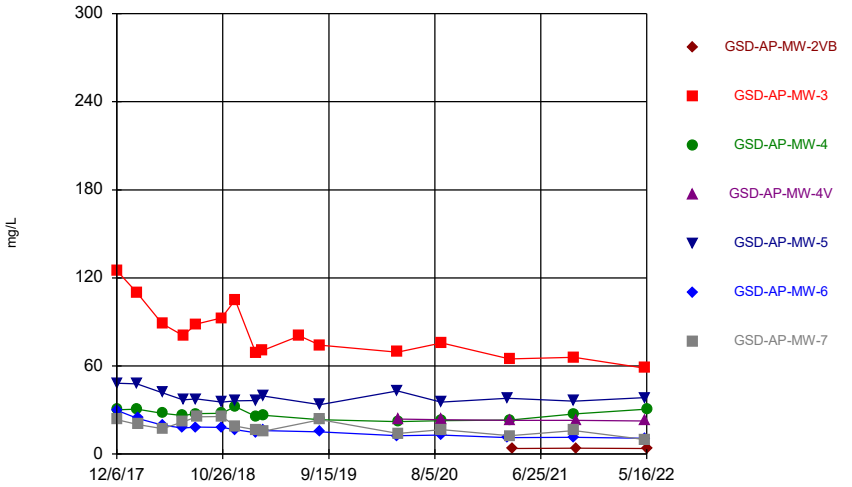
Time Series



Constituent: Calcium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Time Series



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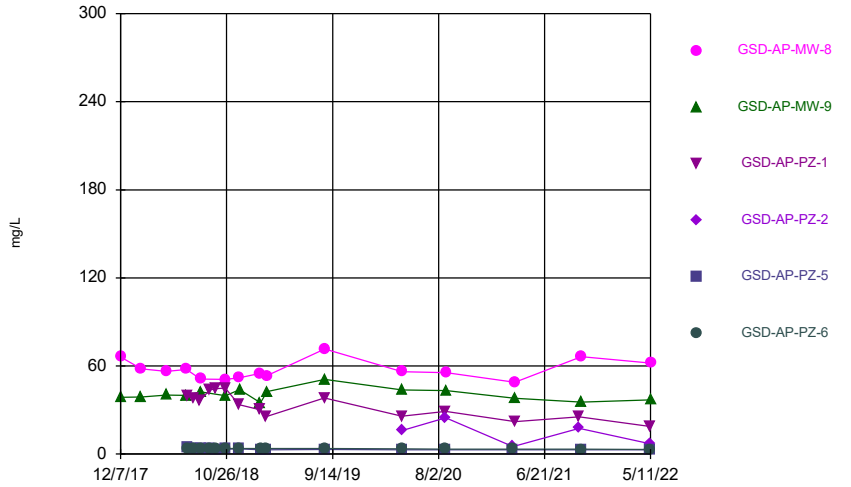
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

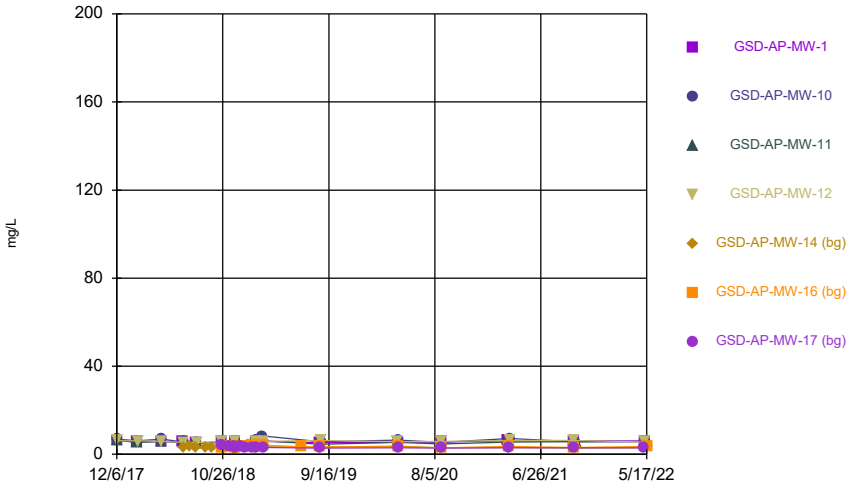
Time Series



Constituent: Calcium Analysis Run 7/18/2022 1:35 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

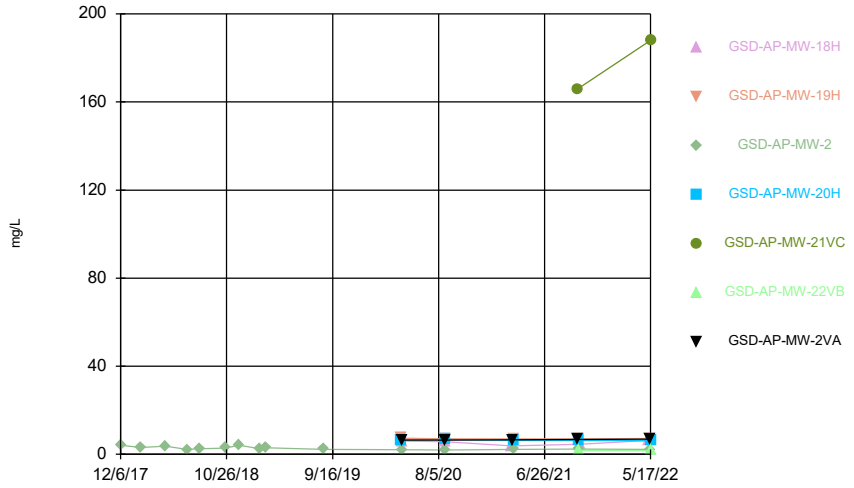
Time Series



Constituent: Chloride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

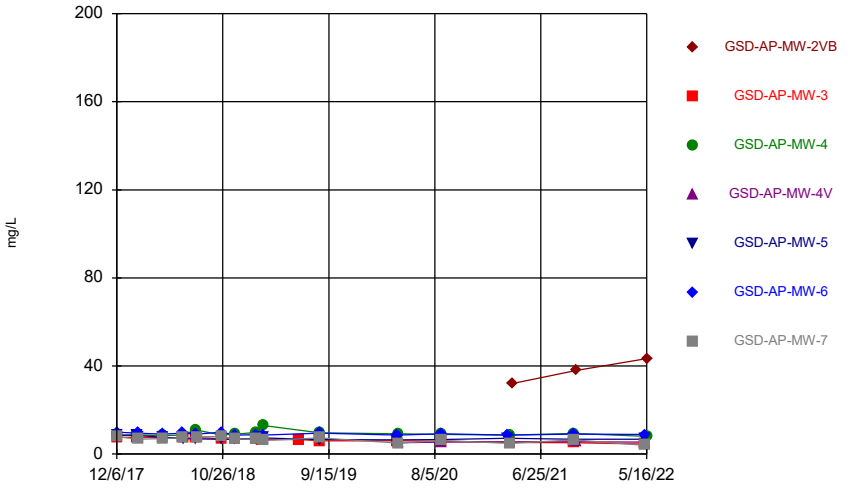
Time Series



Constituent: Chloride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

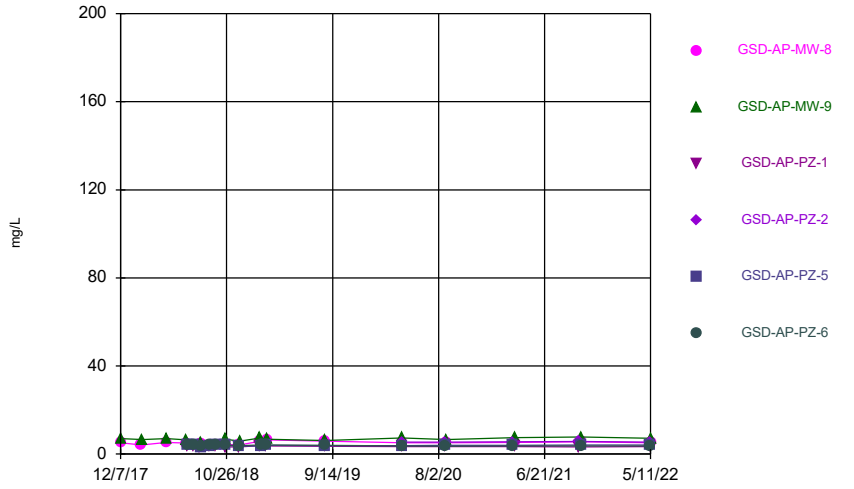
Time Series



Constituent: Chloride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

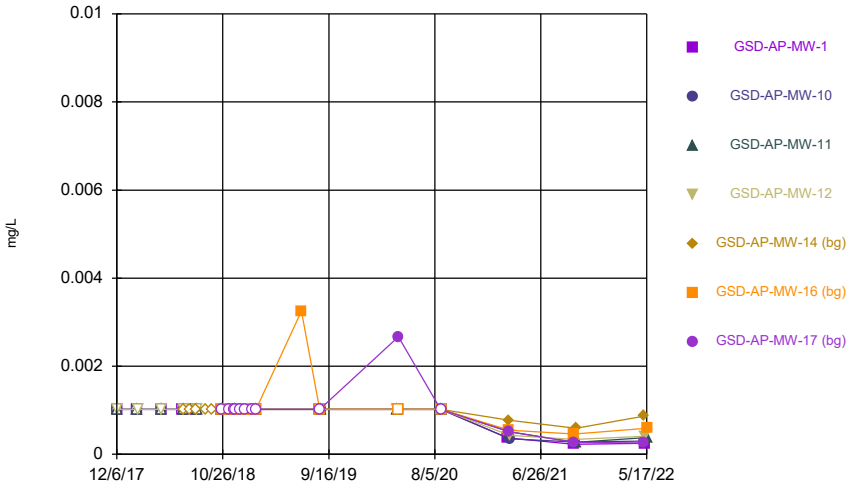
Time Series



Constituent: Chloride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

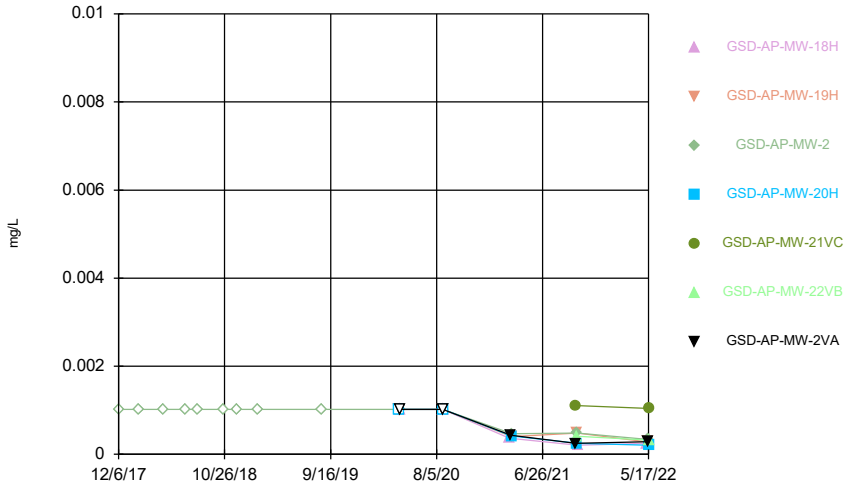
Time Series



Constituent: Chromium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

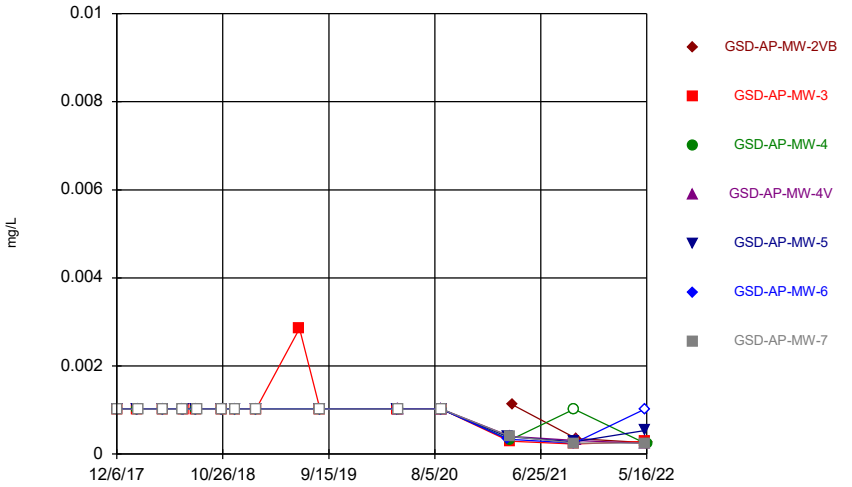
Time Series



Constituent: Chromium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

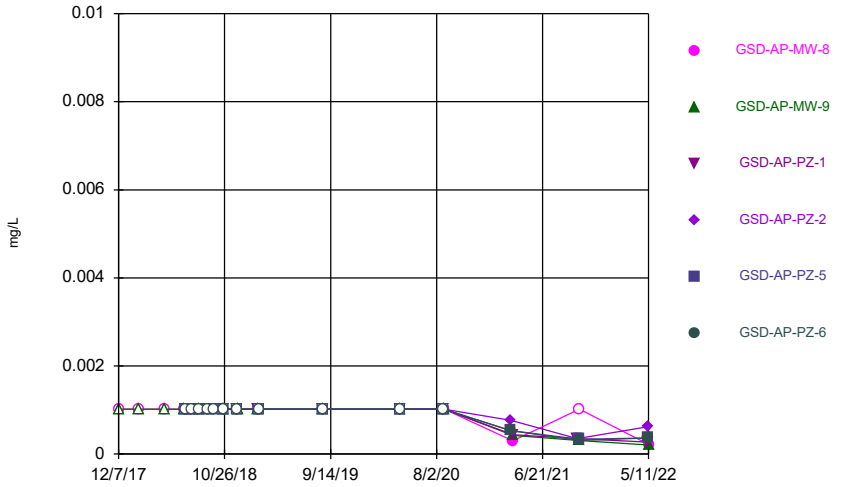
Time Series



Constituent: Chromium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

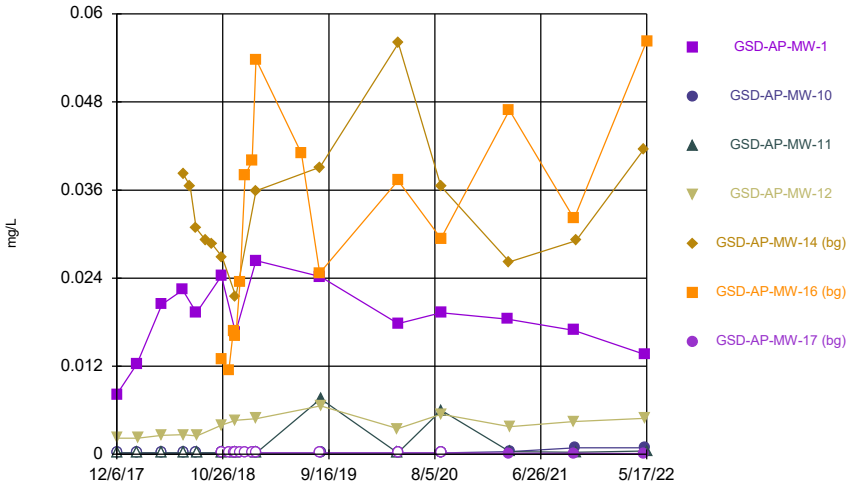
Time Series



Constituent: Chromium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

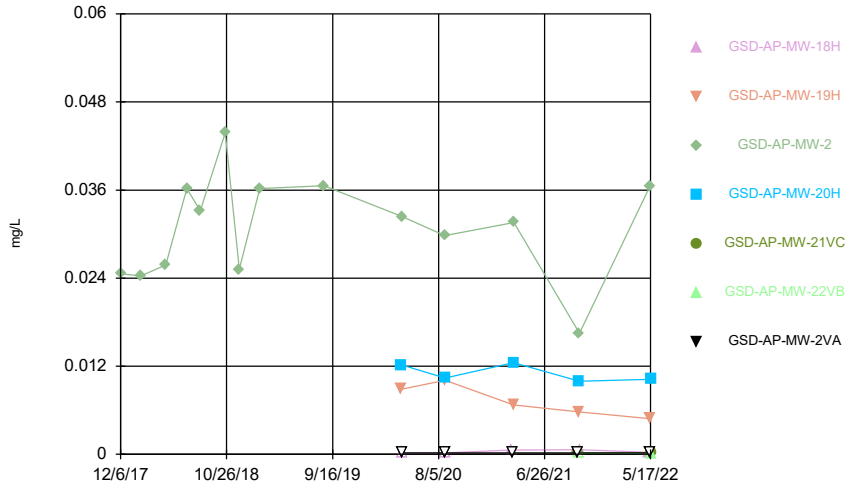
Time Series



Constituent: Cobalt Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

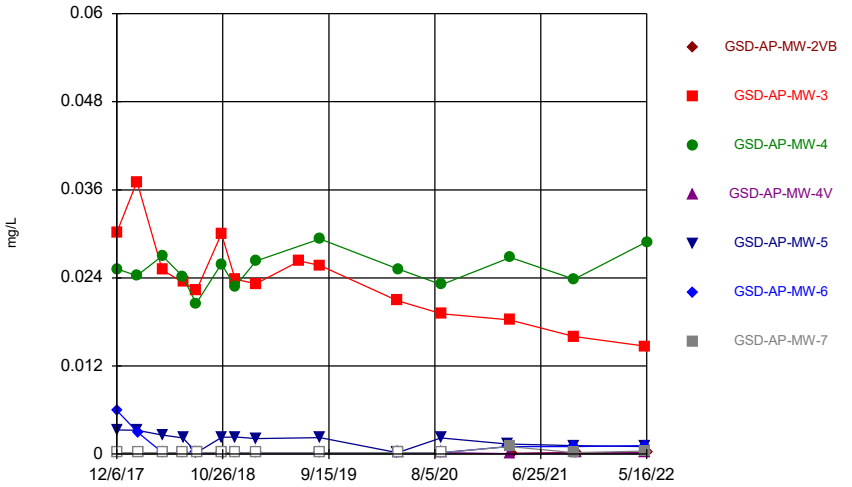
Time Series



Constituent: Cobalt Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

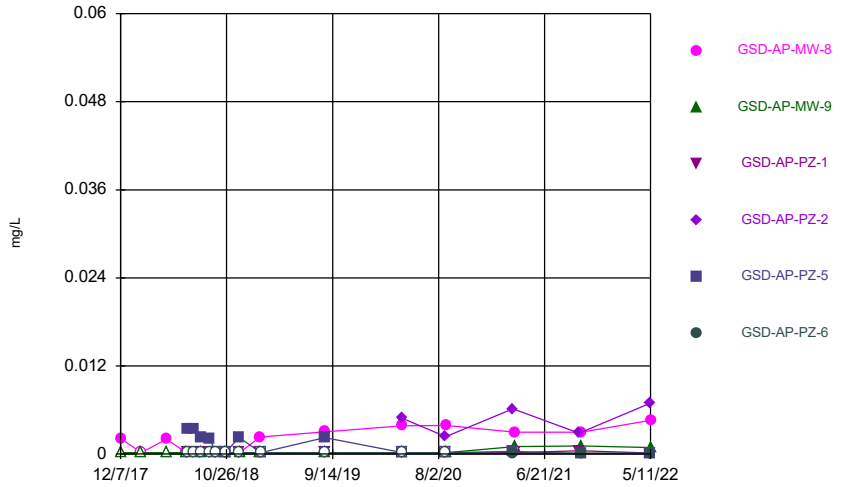
Time Series



Constituent: Cobalt Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

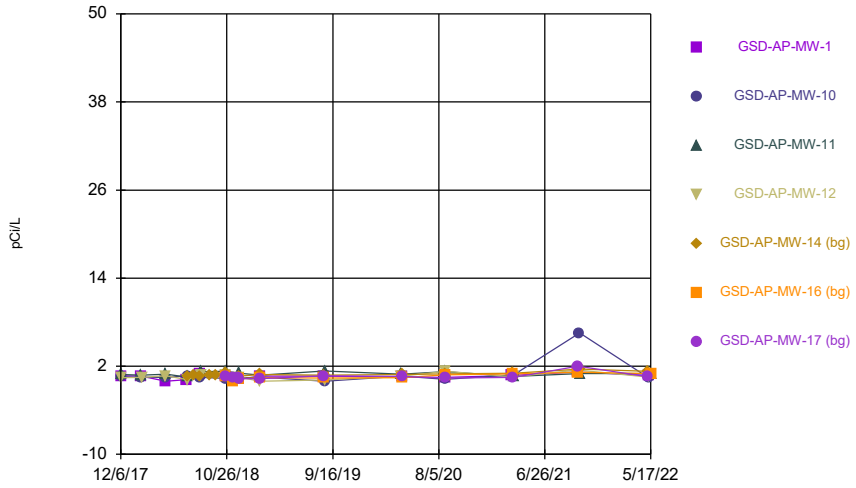
Time Series



Constituent: Cobalt Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

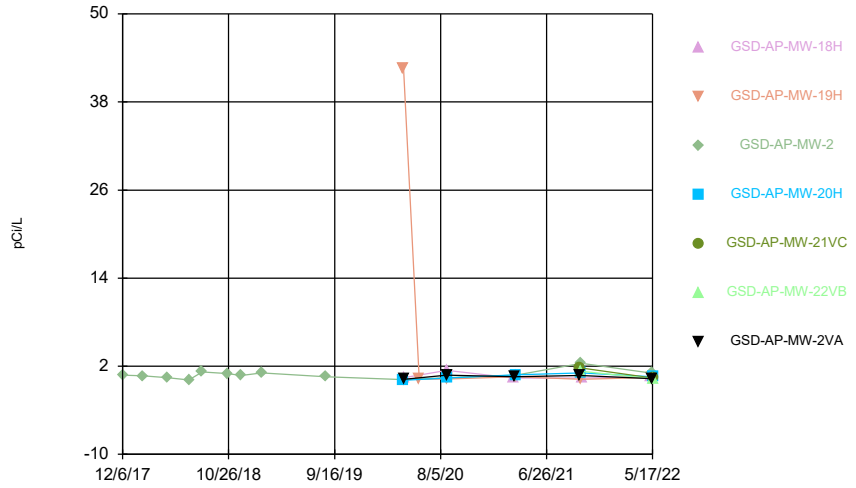
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

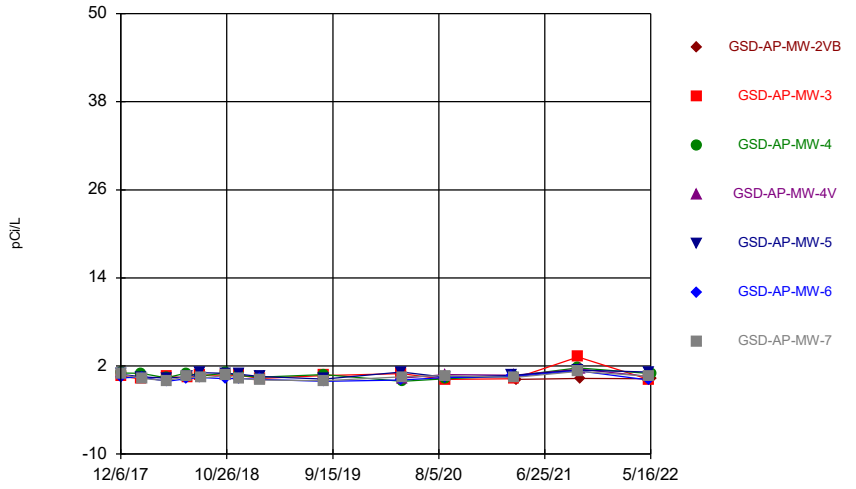
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

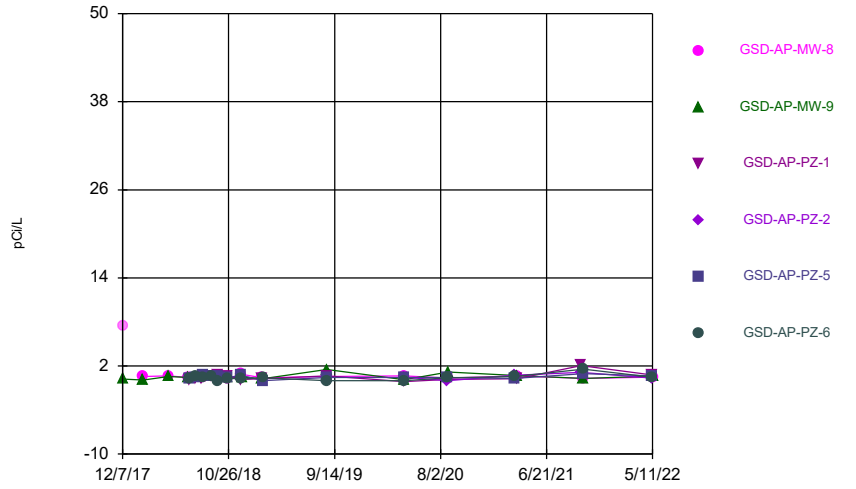
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

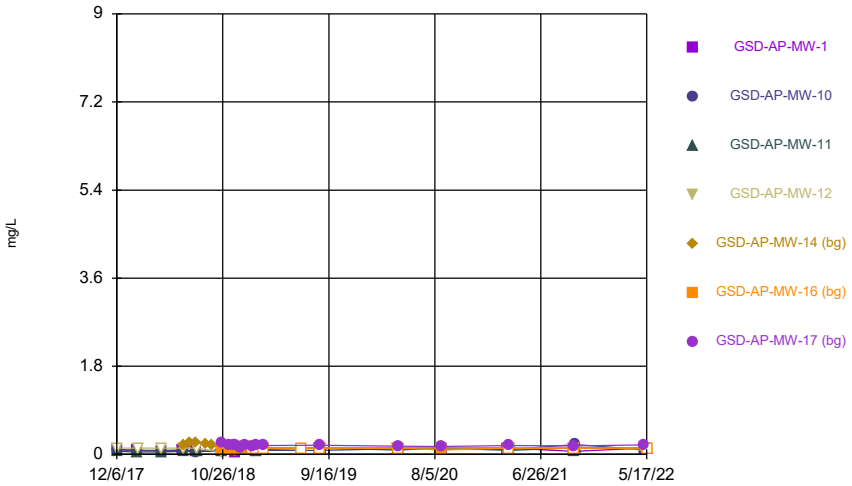
Time Series



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

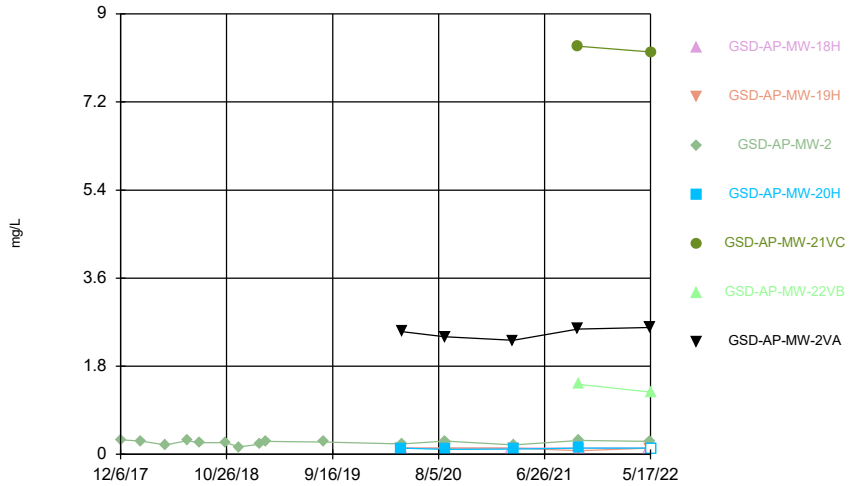
Time Series



Constituent: Fluoride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

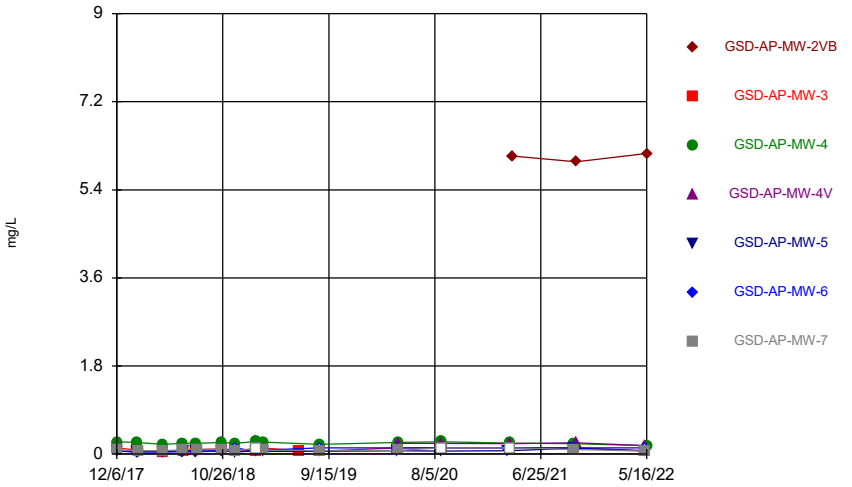
Time Series



Constituent: Fluoride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

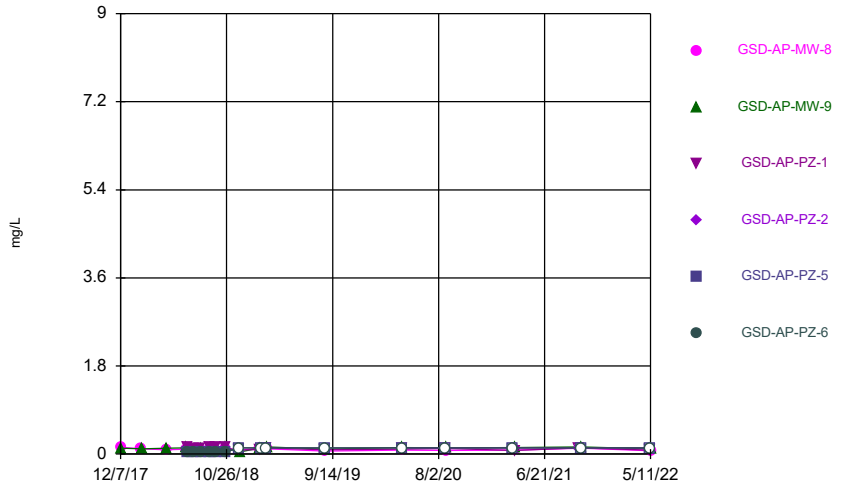
Time Series



Constituent: Fluoride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

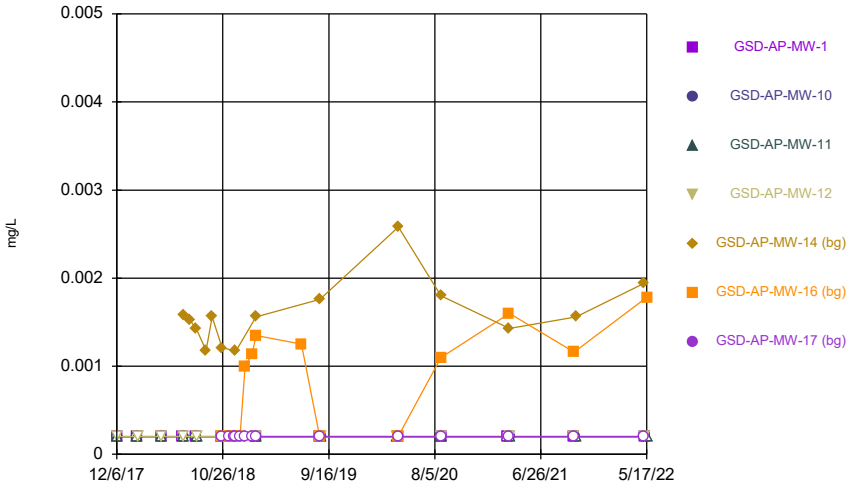
Time Series



Constituent: Fluoride Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

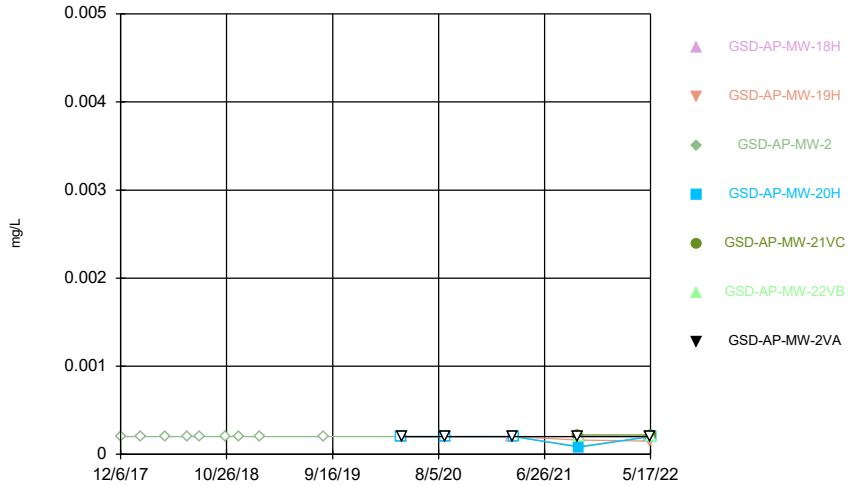
Time Series



Constituent: Lead Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

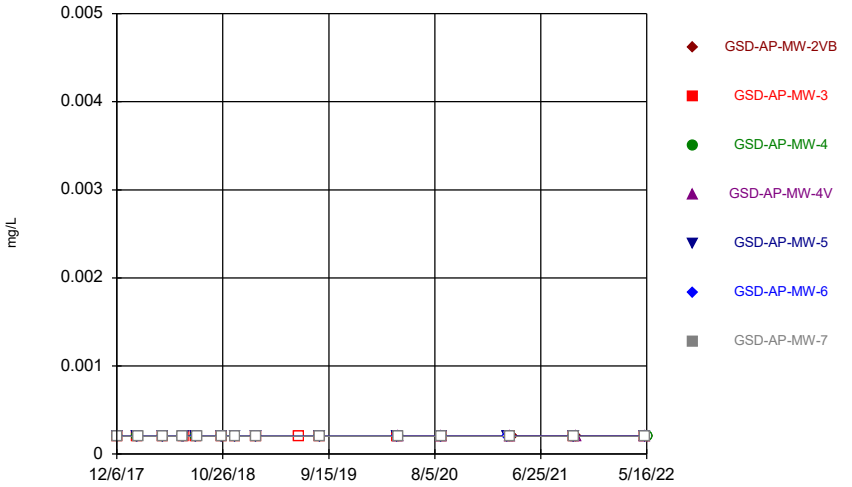
Time Series



Constituent: Lead Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

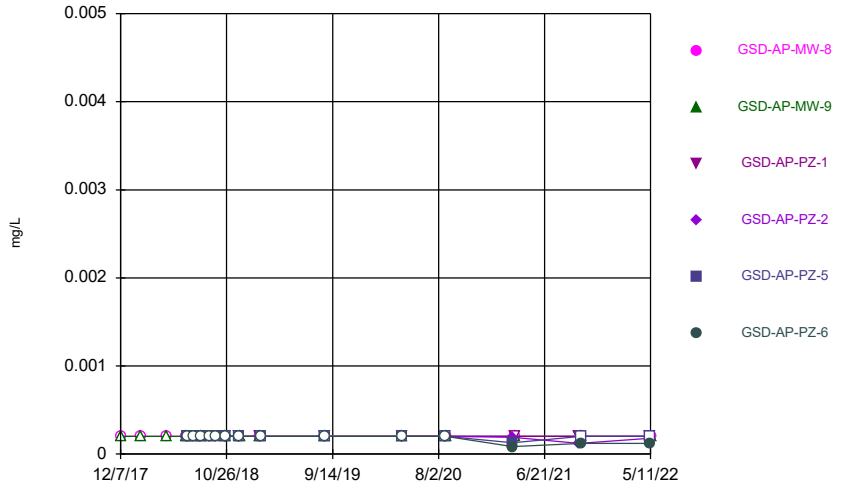
Time Series



Constituent: Lead Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

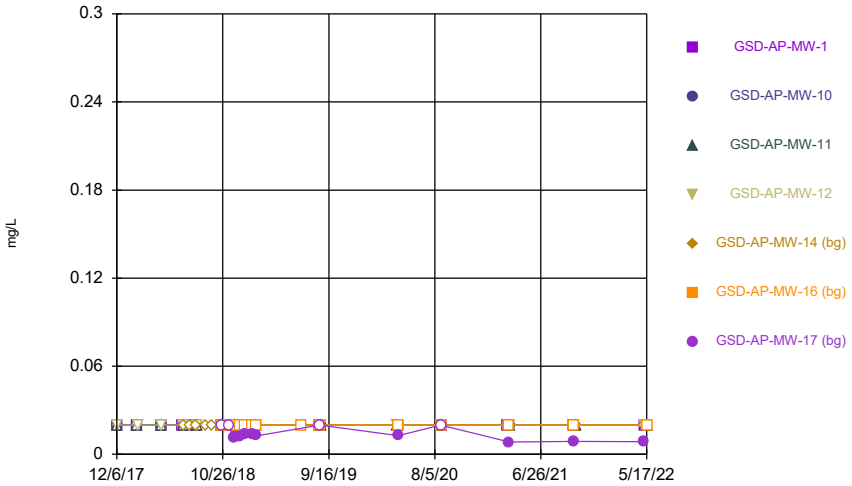
Time Series



Constituent: Lead Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

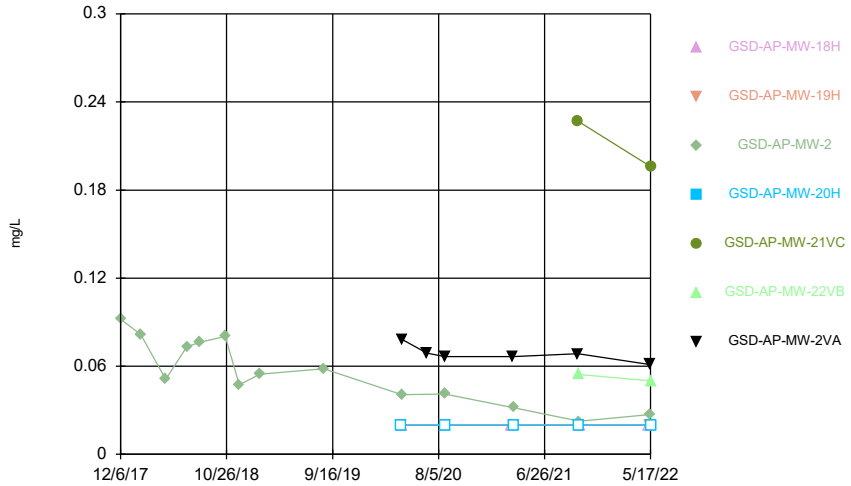
Time Series



Constituent: Lithium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

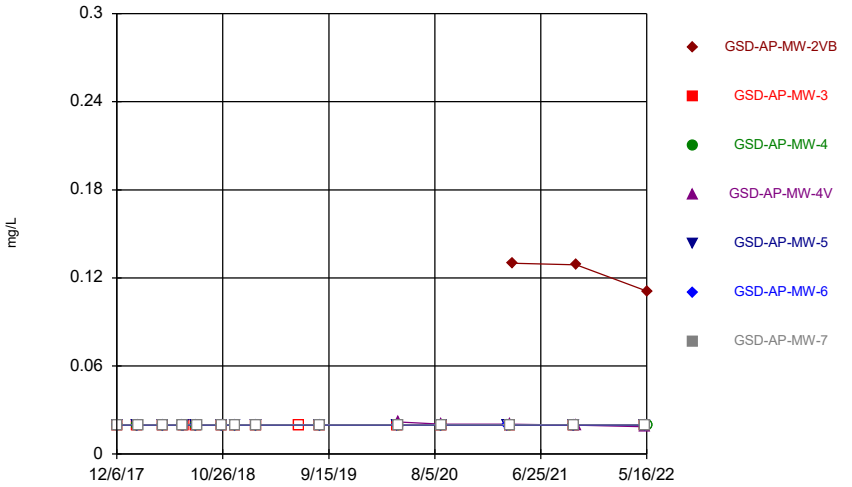
Time Series



Constituent: Lithium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

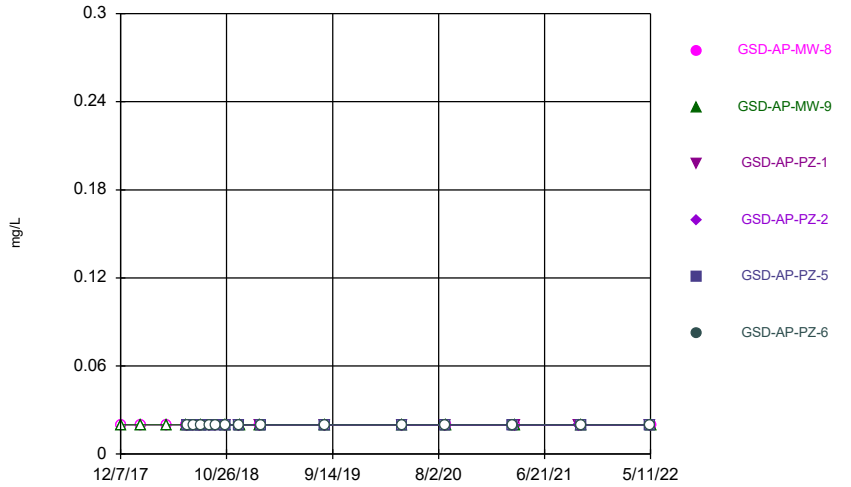
Time Series



Constituent: Lithium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

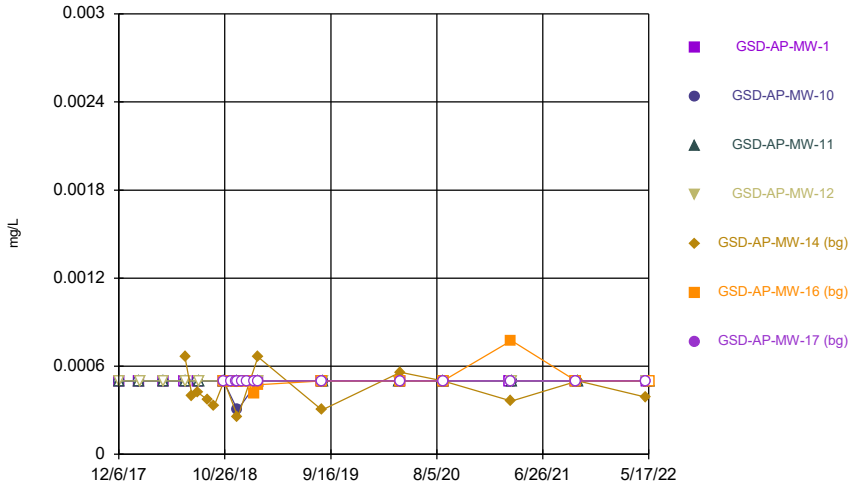
Time Series



Constituent: Lithium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

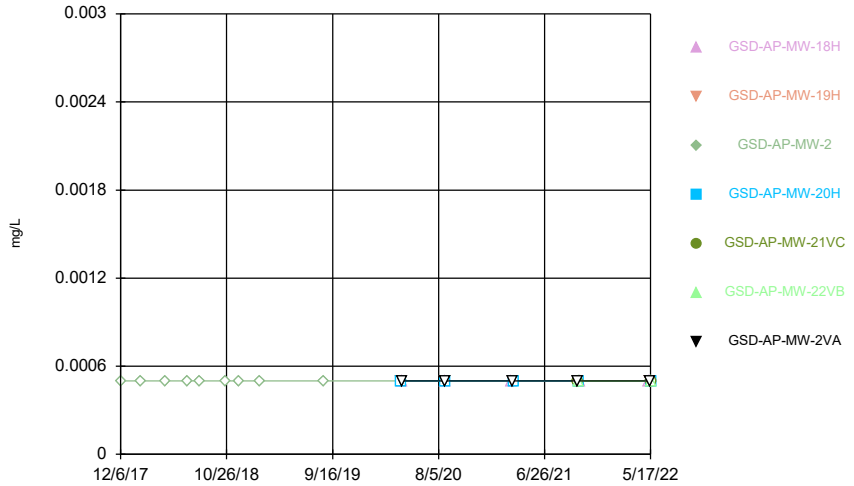
Time Series



Constituent: Mercury Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

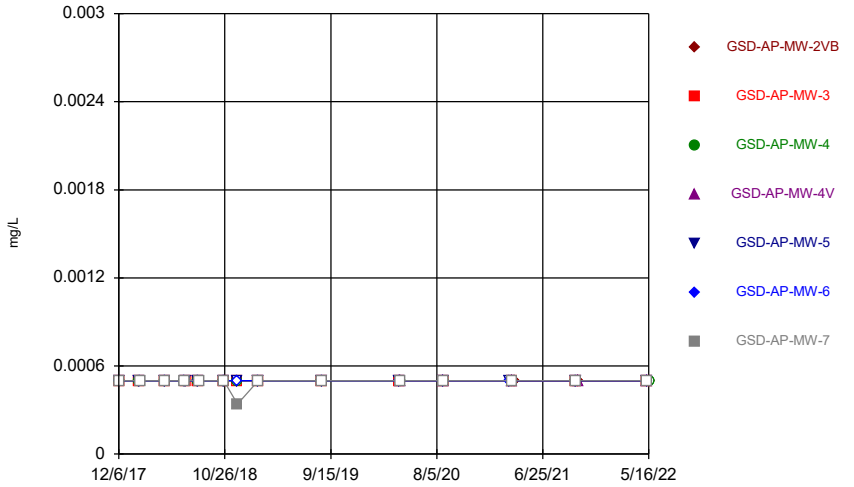
Time Series



Constituent: Mercury Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

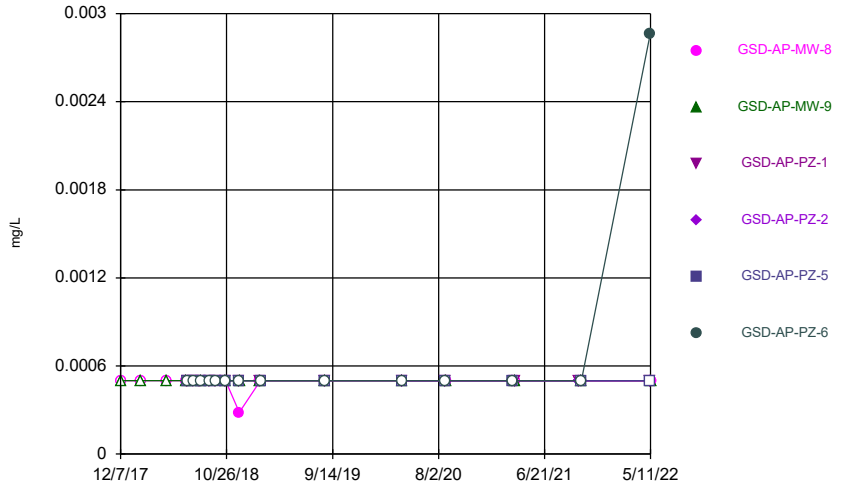
Time Series



Constituent: Mercury Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

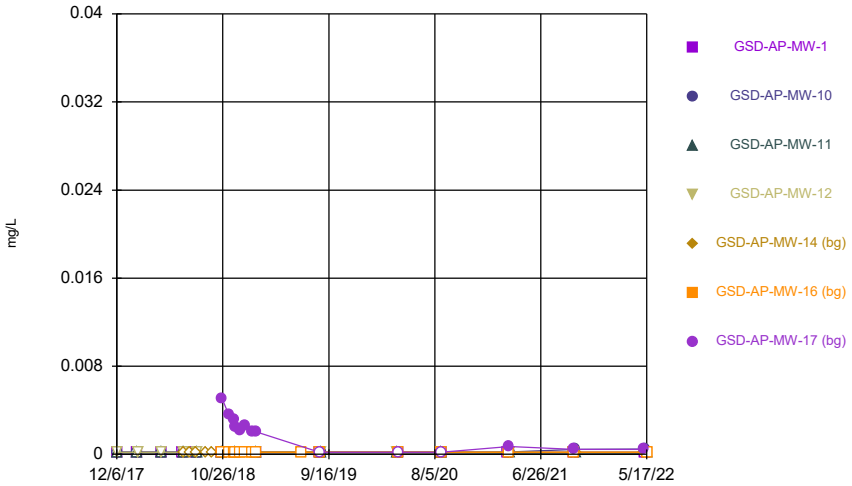
Time Series



Constituent: Mercury Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

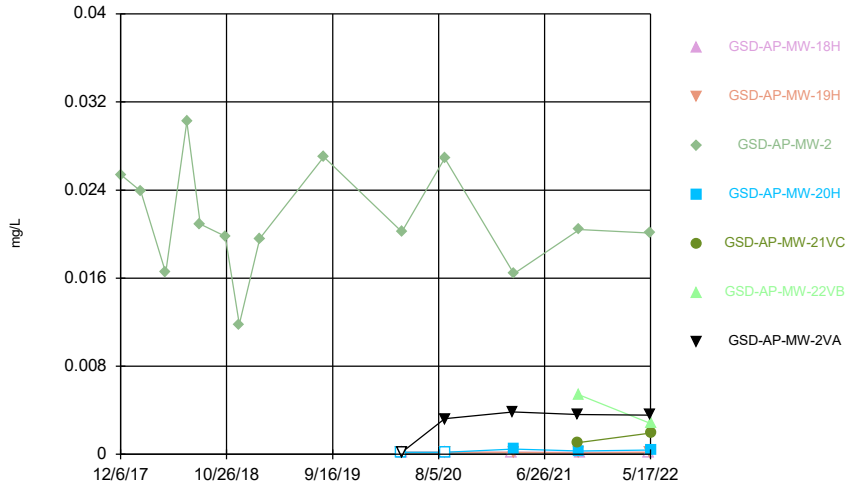
Time Series



Constituent: Molybdenum Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

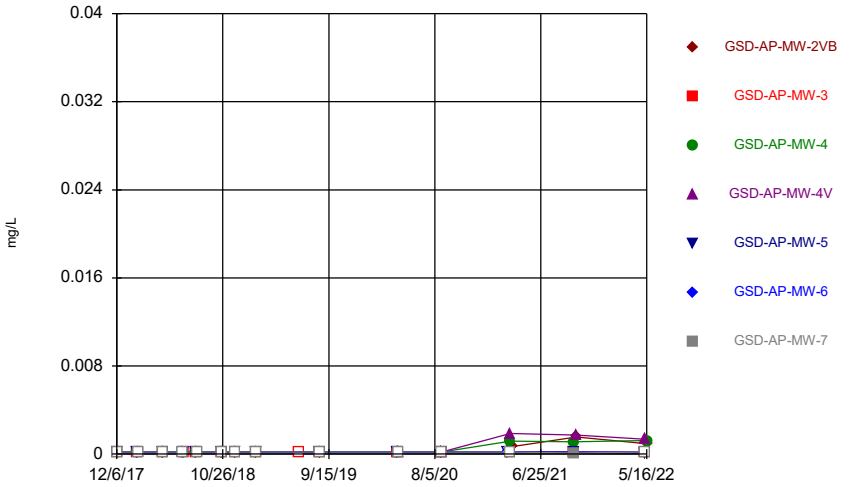
Time Series



Constituent: Molybdenum Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

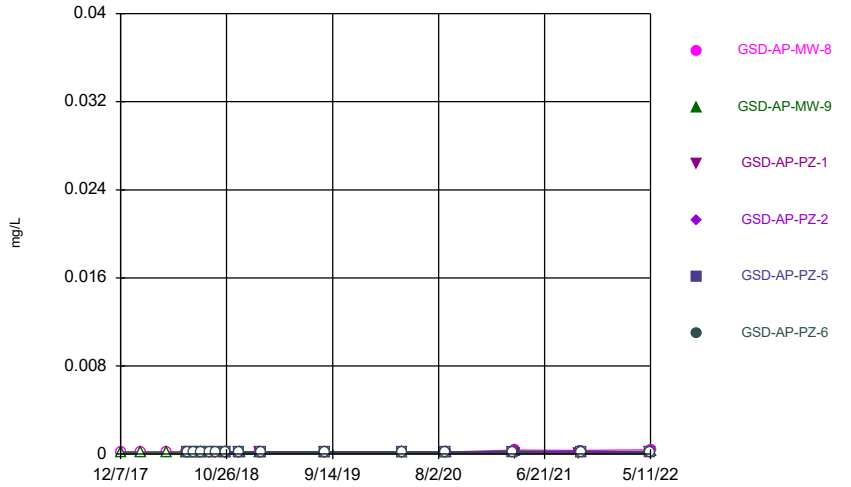
Time Series



Constituent: Molybdenum Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

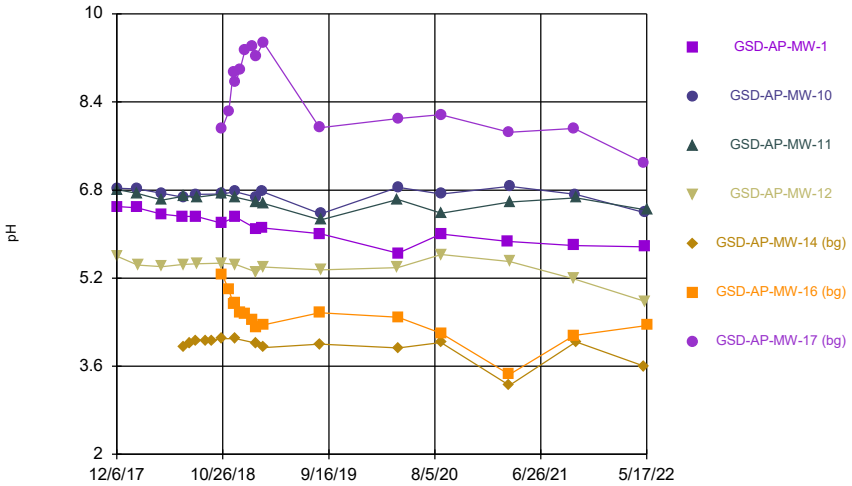
Time Series



Constituent: Molybdenum Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

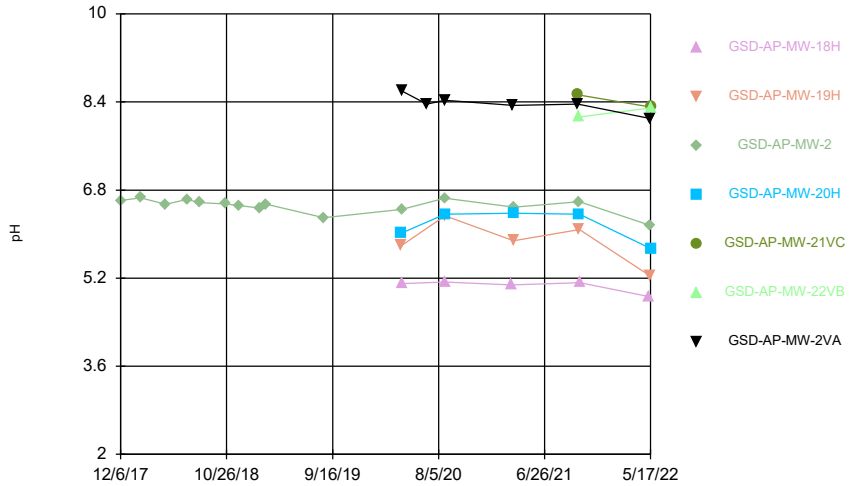
Time Series



Constituent: pH Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

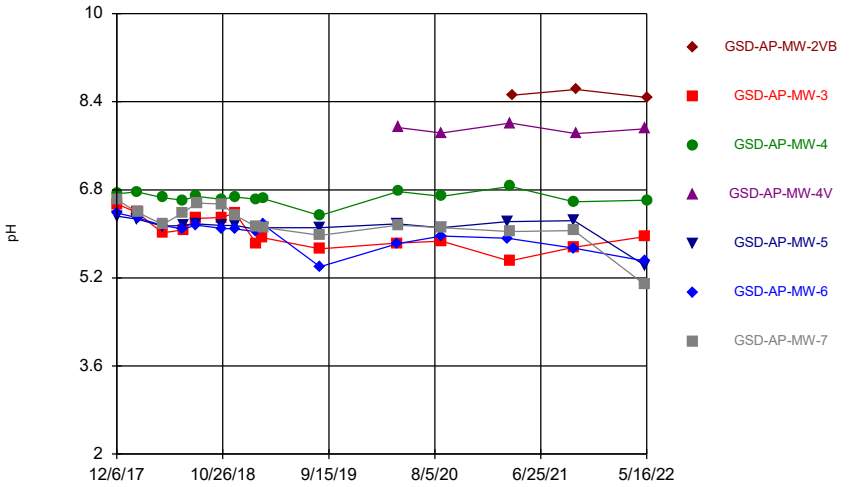
Time Series



Constituent: pH Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

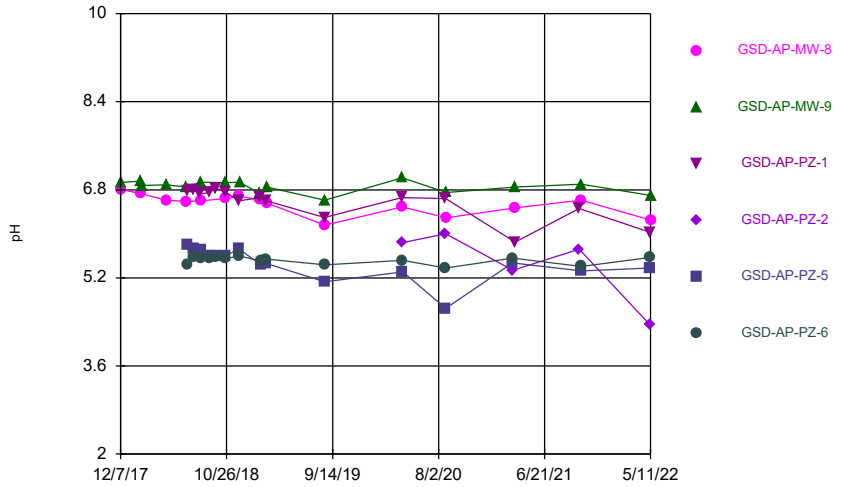
Time Series



Constituent: pH Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

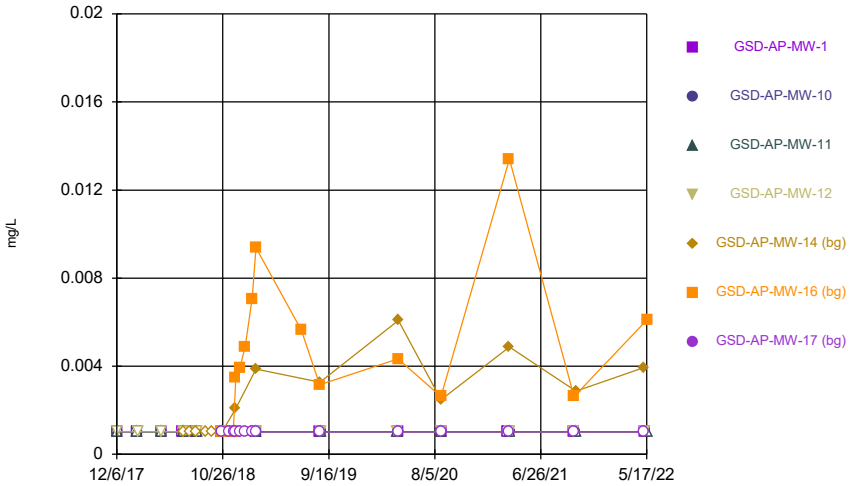
Time Series



Constituent: pH Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

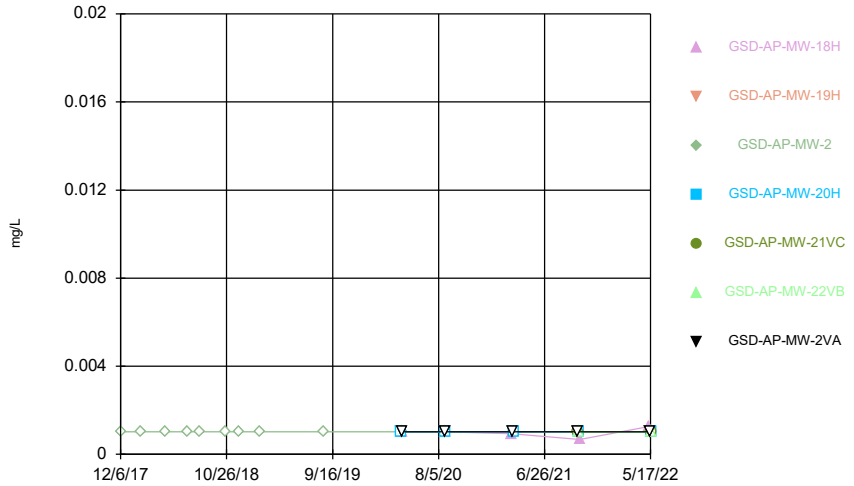
Time Series



Constituent: Selenium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

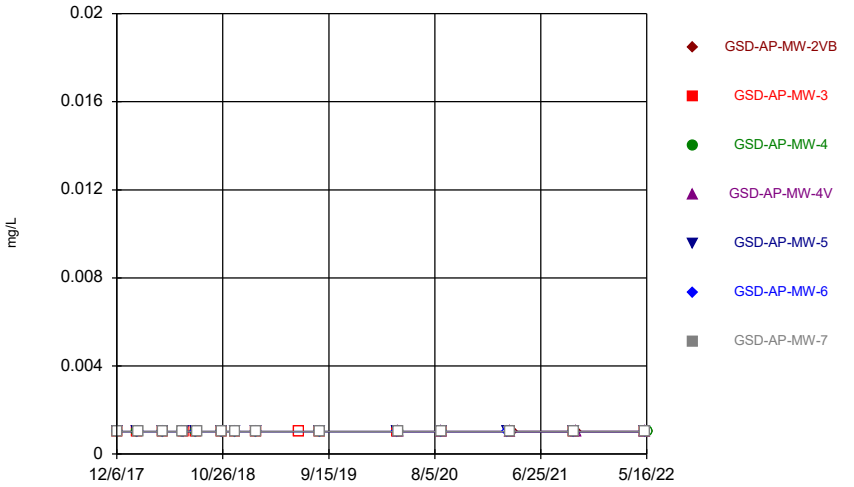
Time Series



Constituent: Selenium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

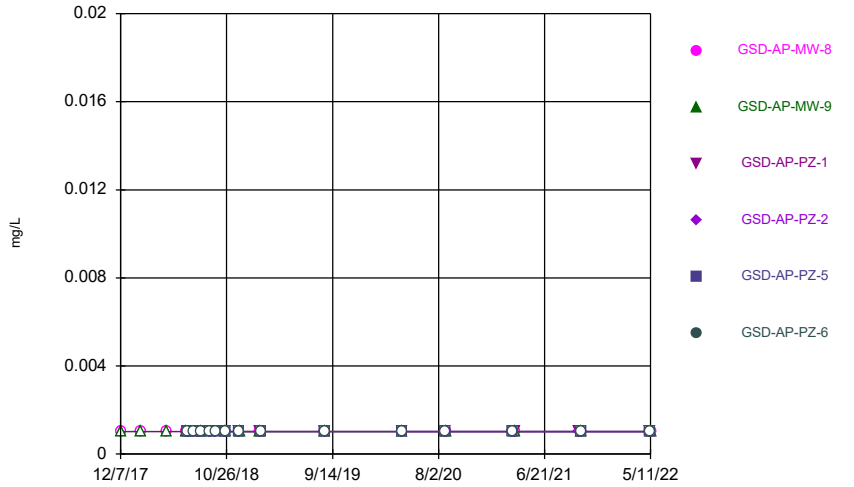
Time Series



Constituent: Selenium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

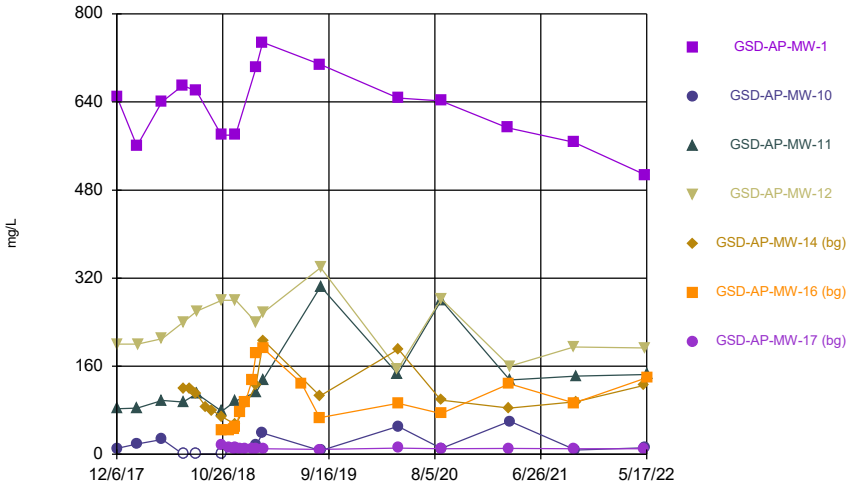
Time Series



Constituent: Selenium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

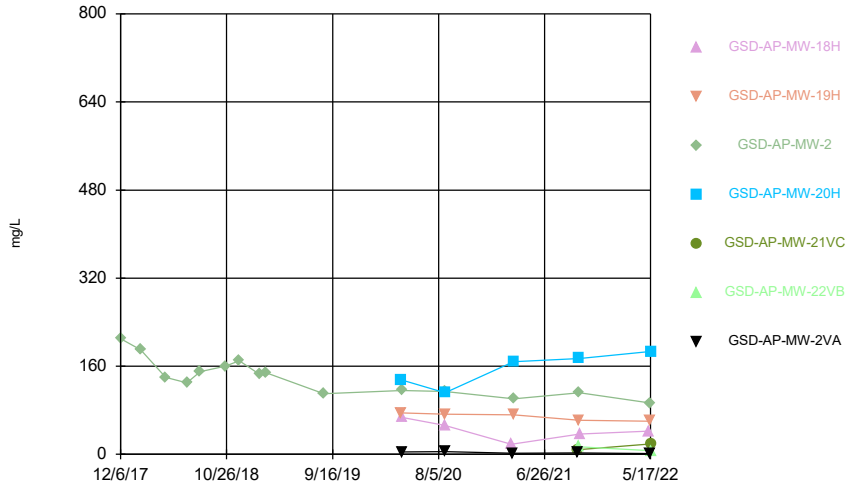
Time Series



Constituent: Sulfate Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

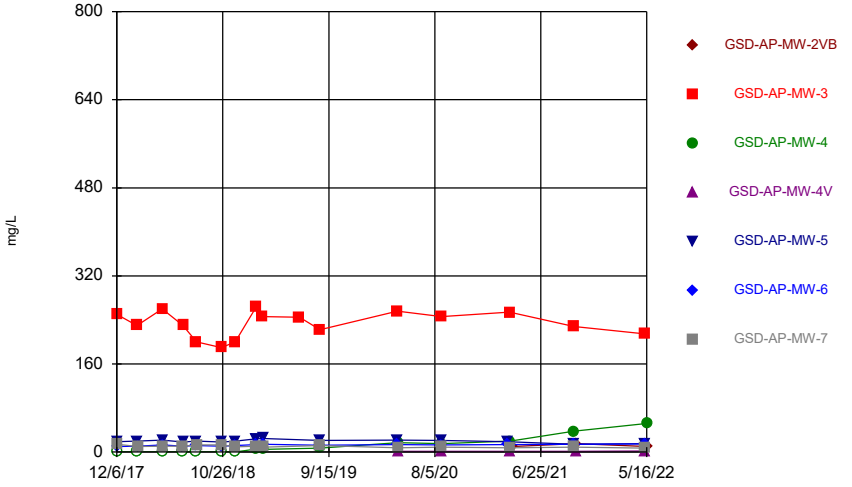
Time Series



Constituent: Sulfate Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

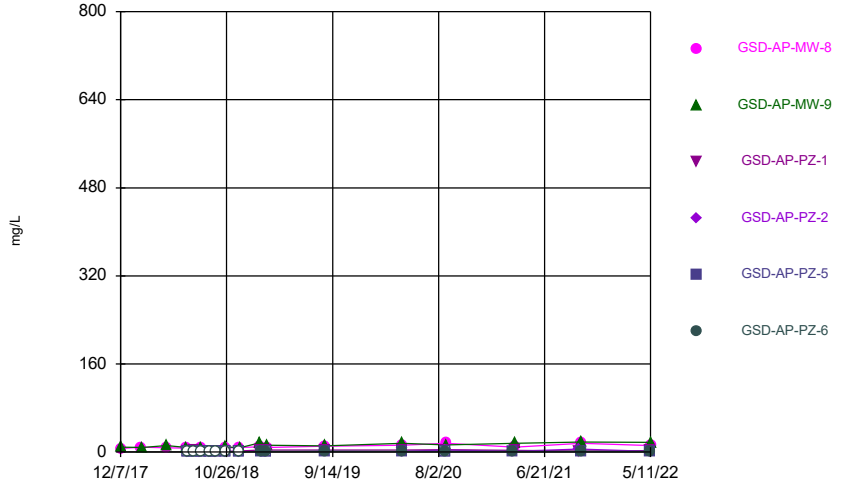
Time Series



Constituent: Sulfate Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

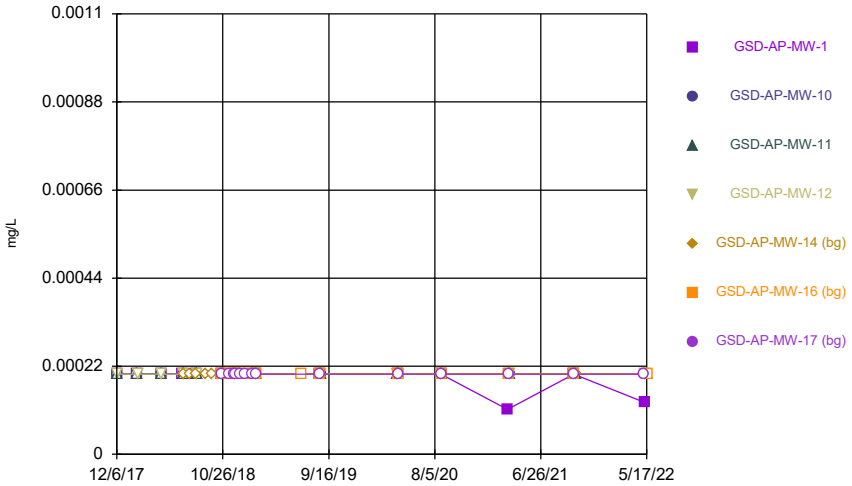
Time Series



Constituent: Sulfate Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

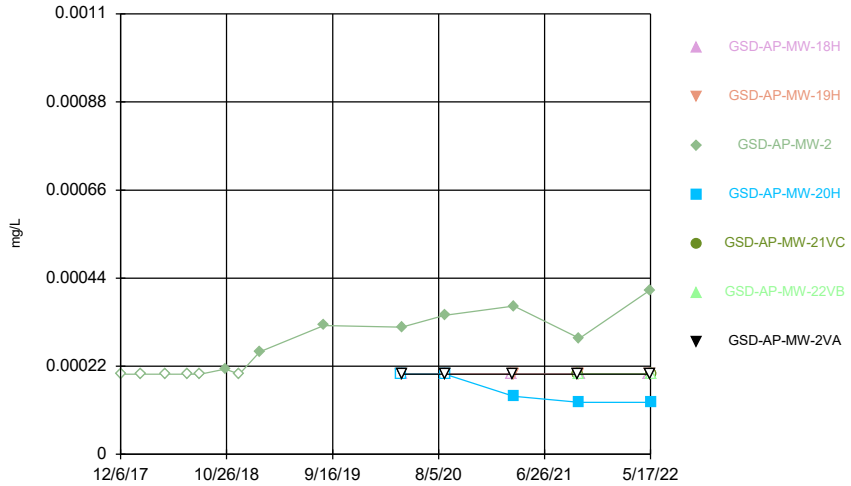
Time Series



Constituent: Thallium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

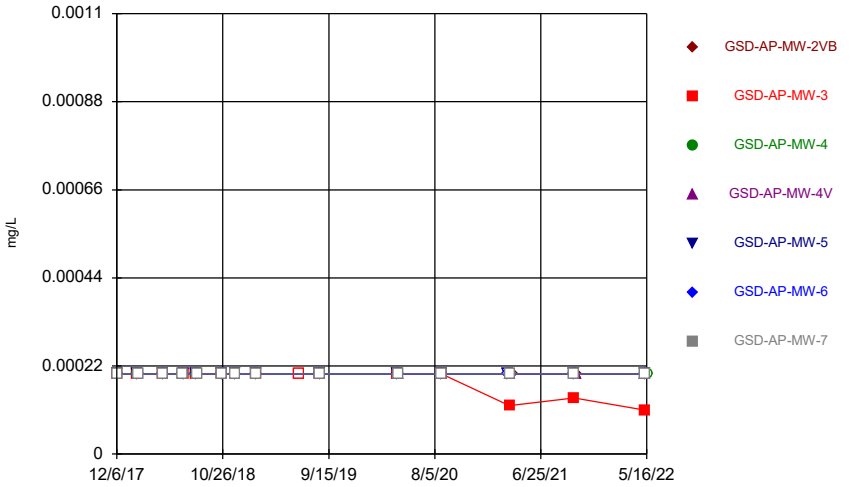
Time Series



Constituent: Thallium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

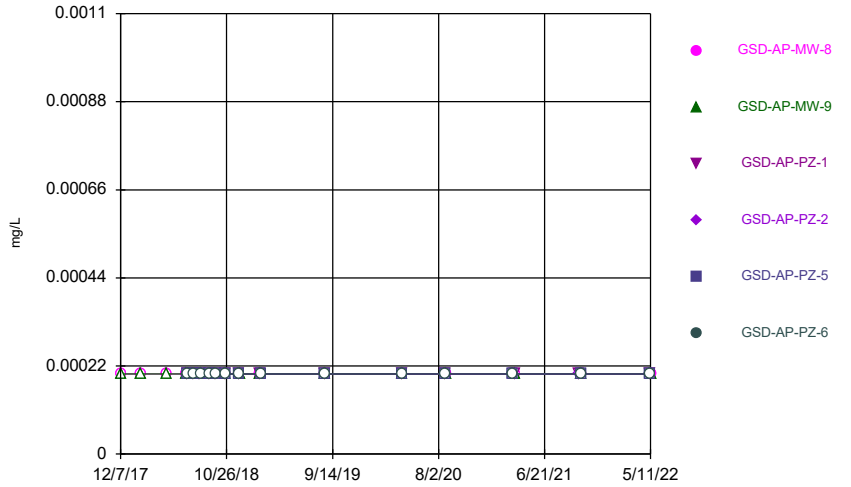
Time Series



Constituent: Thallium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

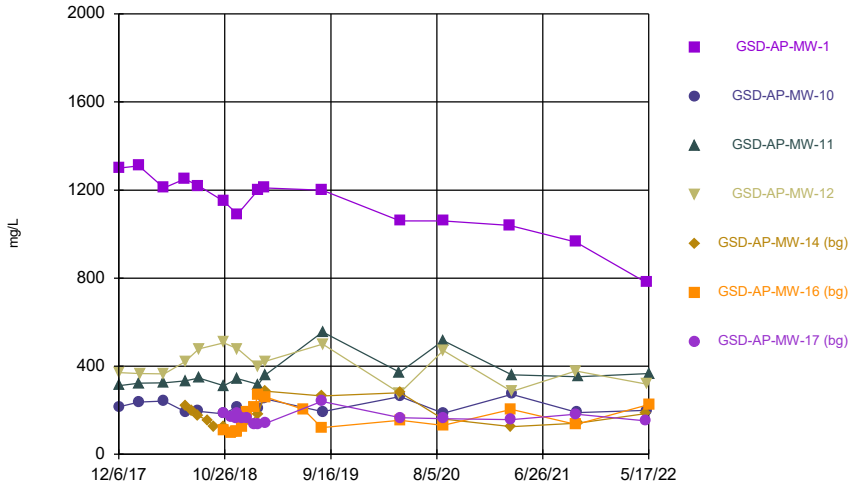
Time Series



Constituent: Thallium Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

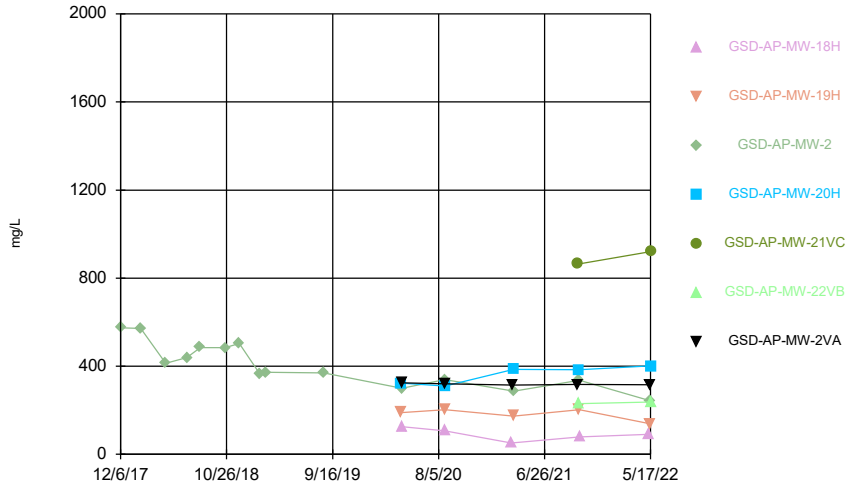
Time Series



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

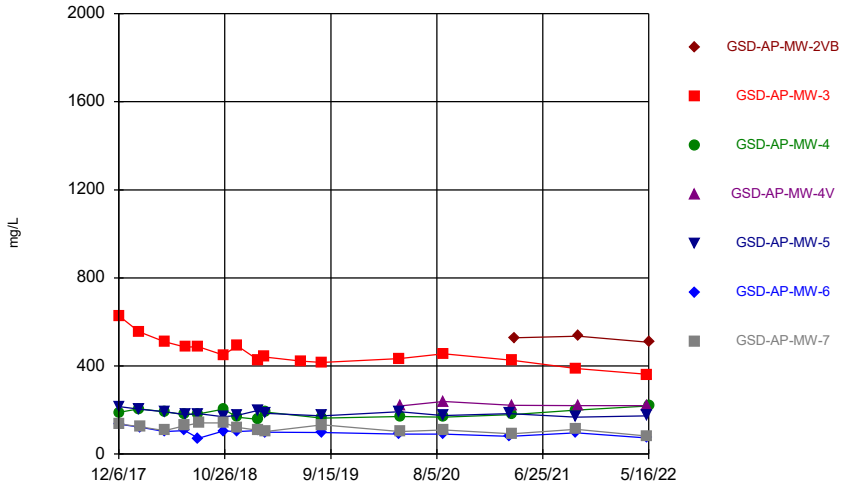
Time Series



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

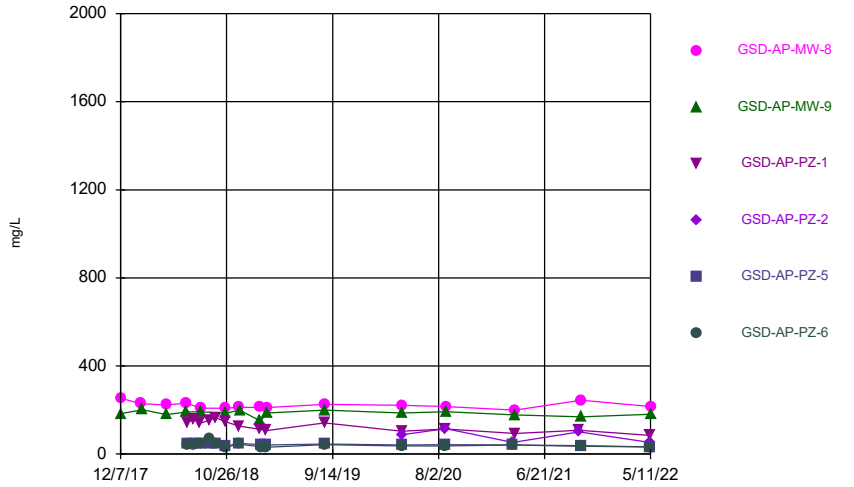
Time Series



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Time Series



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:36 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	<0.00102		
7/18/2018					<0.00102		
8/6/2018					<0.00102		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					<0.00102		
9/24/2018					<0.00102		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					<0.00102	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						<0.00102	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	<0.00102	<0.00102	<0.00102
12/18/2018						<0.00102	<0.00102
1/3/2019						<0.00102	<0.00102
1/24/2019						0.000922 (J)	<0.00102
2/5/2019	<0.00102				<0.00102	<0.00102	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						<0.00102	
8/19/2019						<0.00102	<0.00102
8/20/2019					<0.00102		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				<0.00102	
4/16/2020					<0.00102		<0.00102
8/24/2020							<0.00102
8/25/2020	<0.00102				<0.00102	<0.00102	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	<0.00102						
3/22/2021					<0.00102	<0.00102	<0.00102
3/23/2021		<0.00102	<0.00102	<0.00102			
10/5/2021	<0.00102			<0.00102			
10/6/2021						<0.00102	<0.00102
10/11/2021		<0.00102					
10/12/2021			<0.00102		<0.00102		
5/9/2022					<0.00102		<0.00102
5/10/2022	<0.00102	<0.00102		<0.00102			
5/17/2022			<0.00102			<0.00102	

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	<0.00102						
3/22/2021							<0.00102
3/23/2021		<0.00102		<0.00102			
3/24/2021			<0.00102				
10/6/2021					0.00051 (J)		<0.00102
10/11/2021		<0.00102	<0.00102	<0.00102		0.00167	
10/12/2021	<0.00102						
5/10/2022	<0.00102						
5/16/2022		<0.00102	<0.00102				<0.00102
5/17/2022				<0.00102	0.00051 (J)	<0.00102	

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		<0.00102					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					<0.00102		
3/17/2021						<0.00102	
3/22/2021		<0.00102					
3/23/2021							<0.00102
3/24/2021			<0.00102	<0.00102			
3/30/2021	<0.00102						
10/5/2021		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
10/11/2021				<0.00102			
10/12/2021	<0.00102						
5/9/2022					<0.00102		
5/10/2022		<0.00102				<0.00102	<0.00102
5/11/2022				<0.00102			
5/16/2022	<0.00102		<0.00102				

Time Series

Constituent: Antimony (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					0.00114 (J)	0.00181 (J)
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					<0.00102	<0.00102
3/17/2021				<0.00102		
3/23/2021	<0.00102	<0.00102				
3/24/2021			<0.00102			
10/5/2021			<0.00102	<0.00102		
10/12/2021	<0.00102	<0.00102			<0.00102	<0.00102
5/9/2022			<0.00102	<0.00102		
5/10/2022					<0.00102	<0.00102
5/11/2022	<0.00102	<0.00102				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00179 (J)	0.00247 (J)	0.00279 (J)	<0.0002			
2/6/2018	0.00191 (J)						
2/7/2018		0.00192 (J)	0.00252 (J)				
2/8/2018				<0.0002			
4/23/2018	0.0023 (J)						
4/24/2018		0.00218 (J)	0.00283 (J)	<0.0002			
6/26/2018	0.00306 (J)						
6/27/2018		0.00419 (J)	0.00289 (J)	<0.0002	0.00165 (J)		
7/18/2018					0.00117 (J)		
8/6/2018					<0.0002		
8/7/2018	0.00336 (J)	0.00365 (J)					
8/8/2018			0.00265 (J)	<0.0002			
9/5/2018					<0.0002		
9/24/2018					0.00148 (J)		
10/22/2018	0.00451 (J)	0.00404 (J)					
10/23/2018			0.00287 (J)	<0.0002			
10/24/2018					<0.0002	<0.0002	<0.0002
11/14/2018						<0.0002	<0.0002
11/28/2018						0.00124 (J)	<0.0002
12/4/2018	0.00471 (J)	0.00332 (J)	0.00271 (J)				
12/5/2018				<0.0002	<0.0002	0.00113 (J)	<0.0002
12/18/2018						0.00113 (J)	<0.0002
1/3/2019						0.00175 (J)	<0.0002
1/24/2019						0.00257 (J)	<0.0002
2/5/2019	0.00365 (J)				0.00119 (J)	0.00355 (J)	<0.0002
2/6/2019		0.00333 (J)	0.00272 (J)	<0.0002			
6/24/2019						0.00474 (J)	
8/19/2019						0.00228 (J)	<0.0002
8/20/2019					0.00216 (J)		
8/21/2019	0.00444 (J)						
8/22/2019		0.00394 (J)	0.00229 (J)	<0.0002			
4/14/2020			0.00286 (J)	<0.0002			
4/15/2020	0.00309 (J)	0.00236 (J)				0.0034 (J)	
4/16/2020					0.00483 (J)		<0.0002
8/24/2020							<0.0002
8/25/2020	0.00435 (J)				0.002 (J)	0.00237 (J)	
8/26/2020		0.00422 (J)	0.00246 (J)	<0.0002			
3/16/2021	0.0029						
3/22/2021					0.00188	0.00614	0.00031
3/23/2021		0.00163	0.00275	<0.0002			
10/5/2021	0.00356			<0.0002			
10/6/2021						0.00207	0.00026
10/11/2021		0.0037					
10/12/2021			0.00272		0.00131		
5/9/2022					0.00274		0.00023
5/10/2022	0.00221	0.00361		<0.0002			
5/17/2022			0.00281			0.00457	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.809				
2/6/2018			0.774				
4/23/2018			0.643				
6/27/2018			1.01				
8/7/2018			0.988				
10/22/2018			1.01				
12/4/2018			0.553				
2/5/2019			0.74				
8/20/2019			0.825				
4/14/2020		<0.0002		0.00287 (J)			
4/15/2020	<0.0002		0.709				<0.0002
8/25/2020	<0.0002		0.727				0.00135 (J)
8/26/2020		<0.0002		0.00186 (J)			
3/16/2021	0.000136 (J)						
3/22/2021							0.00145
3/23/2021		0.000512		0.00226			
3/24/2021			0.489				
10/6/2021					0.00162		0.00139
10/11/2021		0.00085	0.424	0.00191		0.00408	
10/12/2021	0.00019 (J)						
5/10/2022	0.00015 (J)						
5/16/2022		0.00018 (J)	0.569				0.00135
5/17/2022				0.002	0.0014	0.00303	

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.00101 (J)					
12/7/2017			0.0132		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	0.0105		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	0.0124				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			0.0132			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			0.013				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	0.0144				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	0.0119			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	0.0107		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	0.0141		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			0.0121	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	0.0133	<0.0002		<0.0002	<0.0002
3/16/2021					8.17E-05 (J)		
3/17/2021						<0.0002	
3/22/2021		0.0002 (J)					
3/23/2021							<0.0002
3/24/2021			0.011	0.00034			
3/30/2021	0.000278						
10/5/2021		0.00021	0.0147		0.00013 (J)	<0.0002	7E-05 (J)
10/11/2021				0.00037			
10/12/2021	0.00043						
5/9/2022					8E-05 (J)		
5/10/2022		0.00016 (J)				<0.0002	<0.0002
5/11/2022				0.00031			
5/16/2022	0.00039		0.0132				

Time Series

Constituent: Arsenic (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.00313 (J)	0.00112 (J)				
2/8/2018	0.00247 (J)	<0.0002				
4/25/2018	0.00291 (J)	<0.0002				
6/26/2018	0.00265 (J)	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	0.00203 (J)	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	0.00246 (J)	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	0.00328 (J)					
12/5/2018		0.00111 (J)				
2/5/2019			<0.0002			
2/6/2019	0.00325 (J)	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	0.00302 (J)	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	0.00295 (J)	0.00118 (J)				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	0.00304 (J)	<0.0002				
3/16/2021					8.08E-05 (J)	<0.0002
3/17/2021				8.26E-05 (J)		
3/23/2021	0.00282	0.00063				
3/24/2021			<0.0002			
10/5/2021			<0.0002	9E-05 (J)		
10/12/2021	0.00287	0.00064			<0.0002	<0.0002
5/9/2022			<0.0002	0.0001 (J)		
5/10/2022					<0.0002	<0.0002
5/11/2022	0.00323	0.00055				

Time Series

Constituent: Barium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.0807	0.308	0.349	0.0501			
2/6/2018	0.0546						
2/7/2018		0.289	0.297				
2/8/2018				0.0375			
4/23/2018	0.0488						
4/24/2018		0.359	0.338	0.0405			
6/26/2018	0.0479						
6/27/2018		0.307	0.338	0.0466	0.0338		
7/18/2018					0.03		
8/6/2018					0.0274		
8/7/2018	0.0402	0.25					
8/8/2018			0.307	0.0448			
9/5/2018					0.0275		
9/24/2018					0.0264		
10/22/2018	0.0427	0.29					
10/23/2018			0.311	0.054			
10/24/2018					0.0276	0.0499	0.218
11/14/2018						0.0458	0.203
11/28/2018						0.0476	0.191
12/4/2018	0.0434	0.305	0.331				
12/5/2018				0.0493	0.0256	0.0475	0.209
12/18/2018						0.0461	0.199
1/3/2019						0.0426	0.176
1/24/2019						0.0485	0.206
2/5/2019	0.0439				0.0314	0.0354	0.168
2/6/2019		0.265	0.286	0.036			
6/24/2019						0.0294	
8/19/2019						0.0314	0.259
8/20/2019					0.0274		
8/21/2019	0.037						
8/22/2019		0.302	0.214	0.0455			
4/14/2020			0.168	0.0279			
4/15/2020	0.0329	0.35				0.028	
4/16/2020					0.0327		0.257
8/24/2020							0.312
8/25/2020	0.0358				0.0291	0.0261	
8/26/2020		0.322	0.165	0.0503			
3/16/2021	0.0331						
3/22/2021					0.0254	0.0278	0.29
3/23/2021		0.395	0.169	0.0315			
10/5/2021	0.0304			0.0417			
10/6/2021						0.0215	0.307
10/11/2021		0.292					
10/12/2021			0.17		0.0268		
5/9/2022					0.0365		0.309
5/10/2022	0.0275	0.318		0.0377			
5/17/2022			0.195			0.0288	

Time Series

Constituent: Barium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.0842				
2/6/2018			0.0716				
4/23/2018			0.0518				
6/27/2018			0.0578				
8/7/2018			0.0566				
10/22/2018			0.0536				
12/4/2018			0.0589				
2/5/2019			0.0418				
8/20/2019			0.0685				
4/14/2020		0.153		0.189			
4/15/2020	0.0389		0.0607				0.2
8/25/2020	0.0388		0.0812				0.135
8/26/2020		0.201		0.197			
3/16/2021	0.0243						
3/22/2021							0.114
3/23/2021		0.148		0.217			
3/24/2021			0.0676				
10/6/2021					0.374		0.12
10/11/2021		0.17	0.0807	0.134		0.238	
10/12/2021	0.0298						
5/10/2022	0.0361						
5/16/2022		0.124	0.0974				0.132
5/17/2022				0.115	0.435	0.276	

Time Series

Constituent: Barium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.126					
12/7/2017			0.239		0.279	0.0809	0.083
2/6/2018		0.0721	0.206		0.195		
2/8/2018						0.0566	0.0756
4/24/2018		0.0492	0.217				
4/25/2018					0.26	0.0553	0.0764
6/26/2018			0.208			0.0604	0.0799
6/27/2018		0.0453			0.249		
8/6/2018			0.189				
8/7/2018		0.0431			0.216	0.0542	
8/8/2018							0.0791
10/22/2018		0.0541	0.209				
10/23/2018					0.26	0.0608	0.0898
12/3/2018		0.0545	0.214			0.0633	
12/4/2018							0.0789
12/5/2018					0.245		
2/5/2019		0.0363	0.173		0.215	0.0551	
2/6/2019							0.0685
6/18/2019		0.0369					
8/20/2019		0.0405	0.188		0.238	0.0731	
8/21/2019							0.0946
4/13/2020		0.0349			0.241	0.0635	
4/15/2020			0.159	0.457			0.0653
8/24/2020					0.238		
8/26/2020		0.0363	0.181	0.534		0.0771	0.0845
3/16/2021					0.217		
3/17/2021						0.0656	
3/22/2021		0.0354					
3/23/2021							0.0602
3/24/2021			0.171	0.477			
3/30/2021	0.313						
10/5/2021		0.0344	0.202		0.221	0.0741	0.0716
10/11/2021				0.483			
10/12/2021	0.242						
5/9/2022					0.236		
5/10/2022		0.0287				0.0762	0.0527
5/11/2022				0.525			
5/16/2022	0.322		0.23				

Time Series

Constituent: Barium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.244	0.187				
2/8/2018	0.135	0.148				
4/25/2018	0.224	0.158				
6/26/2018	0.181	0.16				
6/27/2018			0.115		0.154	0.0298
7/18/2018			0.116		0.15	0.0312
8/7/2018			0.0906			
8/8/2018	0.134	0.161			0.119	0.0265
9/5/2018			0.116		0.123	0.0291
9/24/2018			0.125		0.112	0.029
10/22/2018			0.102			
10/23/2018	0.17	0.183			0.125	0.0298
12/3/2018			0.0784		0.126	0.0307
12/4/2018	0.189					
12/5/2018		0.186				
2/5/2019			0.0578			
2/6/2019	0.226	0.128				
2/7/2019					0.0602	0.028
8/20/2019			0.097			
8/21/2019	0.194	0.183			0.085	0.0312
4/13/2020			0.0529	0.0832		
4/14/2020	0.262	0.186				
4/15/2020					0.0535	0.0296
8/24/2020			0.0733	0.132	0.0565	0.031
8/26/2020	0.235	0.202				
3/16/2021					0.0553	0.0293
3/17/2021				0.045		
3/23/2021	0.249	0.157				
3/24/2021			0.0525			
10/5/2021			0.0811	0.118		
10/12/2021	0.203	0.147			0.0494	0.0303
5/9/2022			0.057	0.0593		
5/10/2022					0.0497	0.0309
5/11/2022	0.32	0.16				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	0.00134 (J)		
7/18/2018					0.00133 (J)		
8/6/2018					0.00129 (J)		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					0.00106 (J)		
9/24/2018					0.000991 (J)		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					0.00082 (J)	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						0.00133 (J)	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	0.00141 (J)	<0.00102	<0.00102
12/18/2018						0.000761 (J)	<0.00102
1/3/2019						0.000677 (J)	<0.00102
1/24/2019						0.000703 (J)	<0.00102
2/5/2019	<0.00102				0.0011 (J)	0.000711 (J)	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						0.000605 (J)	
8/19/2019						<0.00102	<0.00102
8/20/2019					0.00129 (J)		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				<0.00102	
4/16/2020					0.00157 (J)		<0.00102
8/24/2020							<0.00102
8/25/2020	<0.00102				0.00117 (J)	<0.00102	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	<0.00102						
3/22/2021					0.000918 (J)	0.000537 (J)	<0.00102
3/23/2021		<0.00102	<0.00102	<0.00102			
10/5/2021	<0.00102			<0.00102			
10/6/2021						0.00049 (J)	<0.00102
10/11/2021		<0.00102					
10/12/2021			<0.00102		0.00115		
5/9/2022					0.00126		<0.00102
5/10/2022	<0.00102	<0.00102		<0.00102			
5/17/2022			<0.00102			0.00061 (J)	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	<0.00102						
3/22/2021							<0.00102
3/23/2021		<0.00102		<0.00102			
3/24/2021			<0.00102				
10/6/2021					<0.00102		<0.00102
10/11/2021		<0.00102	<0.00102	<0.00102		<0.00102	
10/12/2021	<0.00102						
5/10/2022	<0.00102						
5/16/2022		<0.00102	<0.00102				<0.00102
5/17/2022				<0.00102	<0.00102	<0.00102	

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		<0.00102					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					<0.00102		
3/17/2021						<0.00102	
3/22/2021		<0.00102					
3/23/2021							<0.00102
3/24/2021			<0.00102	<0.00102			
3/30/2021	<0.00102						
10/5/2021		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
10/11/2021				<0.00102			
10/12/2021	<0.00102						
5/9/2022					<0.00102		
5/10/2022		<0.00102				<0.00102	<0.00102
5/11/2022				<0.00102			
5/16/2022	<0.00102		<0.00102				

Time Series

Constituent: Beryllium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					<0.00102	<0.00102
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					<0.00102	<0.00102
3/17/2021				<0.00102		
3/23/2021	<0.00102	<0.00102				
3/24/2021			<0.00102			
10/5/2021			<0.00102	<0.00102		
10/12/2021	<0.00102	<0.00102			<0.00102	<0.00102
5/9/2022			<0.00102	<0.00102		
5/10/2022					<0.00102	<0.00102
5/11/2022	<0.00102	<0.00102				

Time Series

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1.28	0.135	0.12	0.0605 (J)			
2/6/2018	1.29						
2/7/2018		0.12	0.109				
2/8/2018				0.0527 (J)			
4/23/2018	1.21						
4/24/2018		0.144	0.124	0.0476 (J)			
6/26/2018	1.25						
6/27/2018		0.0903 (J)	0.111	0.0539 (J)	<0.1015		
7/18/2018					<0.1015		
8/6/2018					<0.1015		
8/7/2018	1.21	0.106					
8/8/2018			0.135	0.0637 (J)			
9/5/2018					<0.1015		
9/24/2018					<0.1015		
10/22/2018	1.22	0.107					
10/23/2018			0.114	0.0696 (J)			
10/24/2018					<0.1015	0.0261 (J)	0.0357 (J)
11/14/2018						0.0209 (J)	0.0348 (J)
11/28/2018						0.0239 (J)	0.0313 (J)
12/4/2018	1.08	0.103	0.124				
12/5/2018				0.0652 (J)	<0.1015	<0.1015	0.0363 (J)
12/18/2018						<0.1015	0.033 (J)
1/3/2019						0.0209 (J)	0.036 (J)
1/24/2019						0.0271 (J)	0.0307 (J)
2/5/2019	1.2				<0.1015	0.0245 (J)	0.0306 (J)
2/6/2019		0.105	0.112	0.0511 (J)			
2/26/2019	1.15	0.146					
2/27/2019			0.14	0.0494 (J)			
2/28/2019					<0.1015	<0.1015	0.0206 (J)
6/24/2019						<0.1015	
8/19/2019						<0.1015	0.0341 (J)
8/20/2019					<0.1015		
8/21/2019	1.24						
8/22/2019		0.0951 (J)	0.272	0.0625 (J)			
4/14/2020			0.154	0.0377 (J)			
4/15/2020	1.13	0.164				<0.1015	
4/16/2020					<0.1015		0.0331 (J)
8/24/2020							0.0303 (J)
8/25/2020	1.11				<0.1015	<0.1015	
8/26/2020		0.108	0.257	0.0698 (J)			
3/16/2021	1.08						
3/22/2021					<0.1015	<0.1015	0.0333 (J)
3/23/2021		0.188	0.142	0.0452 (J)			
10/5/2021	1.02			0.0661 (J)			
10/6/2021						<0.1015	0.0305 (J)
10/11/2021		0.09 (J)					
10/12/2021			0.125		<0.1015		
5/9/2022					<0.1015		0.0347 (J)
5/10/2022	0.954	0.097 (J)		0.066 (J)			
5/17/2022			0.139			<0.1015	

Time Series

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.758				
2/6/2018			0.733				
4/23/2018			0.608				
6/27/2018			0.619				
8/7/2018			0.697				
10/22/2018			0.754				
12/4/2018			0.737				
2/5/2019			0.575				
2/26/2019			0.566				
8/20/2019			0.566				
4/14/2020		0.448		0.308			
4/15/2020	0.124		0.461				0.587
8/25/2020	0.105		0.528				0.552
8/26/2020		0.39		0.308			
3/16/2021	0.0545 (J)						
3/22/2021							0.537
3/23/2021		0.41		0.419			
3/24/2021			0.437				
10/6/2021					0.532		0.54
10/11/2021		0.328	0.459	0.504		0.378	
10/12/2021	0.0717 (J)						
5/10/2022	0.0883 (J)						
5/16/2022		0.336	0.381				0.556
5/17/2022				0.632	0.548	0.385	

Time Series

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.959					
12/7/2017			0.515		0.566	0.063 (J)	0.102
2/6/2018		1.04	0.541		0.614		
2/8/2018						0.0508 (J)	0.0787 (J)
4/24/2018		0.979	0.475				
4/25/2018					0.498	0.0548 (J)	0.0734 (J)
6/26/2018			0.444			0.0571 (J)	0.094 (J)
6/27/2018		0.982			0.446		
8/6/2018			0.474				
8/7/2018		1			0.442	0.0571 (J)	
8/8/2018							0.103
10/22/2018		1.08	0.496				
10/23/2018					0.436	0.0636 (J)	0.106
12/3/2018		1.05	0.51			0.0568 (J)	
12/4/2018							0.085 (J)
12/5/2018					0.456		
2/5/2019		1.01	0.43		0.453	0.0509 (J)	
2/6/2019							0.0733 (J)
2/25/2019		1.08					
2/26/2019			0.411			0.0527 (J)	
2/27/2019					0.457		0.0548 (J)
6/18/2019		1.09					
8/20/2019		1.06	0.399		0.378	0.0608 (J)	
8/21/2019							0.091 (J)
4/13/2020		1.19			0.359	0.0561 (J)	
4/15/2020			0.344	0.0634 (J)			0.0534 (J)
8/24/2020					0.329		
8/26/2020		1.16	0.398	0.0611 (J)		0.0633 (J)	0.0665 (J)
3/16/2021					0.328		
3/17/2021						0.0563 (J)	
3/22/2021		1.13					
3/23/2021							0.0587 (J)
3/24/2021			0.326	0.0618 (J)			
3/30/2021	0.605						
10/5/2021		1.01	0.344		0.26	0.0649 (J)	0.0673 (J)
10/11/2021				0.0596 (J)			
10/12/2021	0.617						
5/9/2022					0.261		
5/10/2022		0.998				0.0681 (J)	0.0465 (J)
5/11/2022				0.062 (J)			
5/16/2022	0.622		0.342				

Time Series

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.0828 (J)	0.0614 (J)				
2/8/2018	0.0691 (J)	0.0531 (J)				
4/25/2018	0.0571 (J)	0.0551 (J)				
6/26/2018	0.0634 (J)	0.0568 (J)				
6/27/2018			<0.1015		<0.1015	<0.1015
7/18/2018			<0.1015		<0.1015	<0.1015
8/7/2018			<0.1015			
8/8/2018	0.0659 (J)	0.0524 (J)			<0.1015	<0.1015
9/5/2018			<0.1015		<0.1015	<0.1015
9/24/2018			<0.1015		<0.1015	<0.1015
10/22/2018			<0.1015			
10/23/2018	0.0666 (J)	0.0576 (J)			<0.1015	<0.1015
12/3/2018			<0.1015		<0.1015	<0.1015
12/4/2018	0.0617 (J)					
12/5/2018		0.0561 (J)				
2/5/2019			<0.1015			
2/6/2019	0.0586 (J)	0.0627 (J)				
2/7/2019					<0.1015	<0.1015
2/25/2019			<0.1015		<0.1015	<0.1015
2/27/2019	0.0428 (J)	0.0474 (J)				
8/20/2019			<0.1015			
8/21/2019	0.0569 (J)	0.0524 (J)			<0.1015	<0.1015
4/13/2020			<0.1015	<0.1015		
4/14/2020	0.0474 (J)	0.0562 (J)				
4/15/2020					<0.1015	<0.1015
8/24/2020			<0.1015	<0.1015	<0.1015	<0.1015
8/26/2020	0.0501 (J)	0.0565 (J)				
3/16/2021					<0.1015	<0.1015
3/17/2021				<0.1015		
3/23/2021	0.0476 (J)	0.0609 (J)				
3/24/2021			<0.1015			
10/5/2021			<0.1015	<0.1015		
10/12/2021	0.0462 (J)	0.0632 (J)			<0.1015	<0.1015
5/9/2022			<0.1015	<0.1015		
5/10/2022					<0.1015	<0.1015
5/11/2022	0.037 (J)	0.0636 (J)				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	0.000596 (J)			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				0.00064 (J)			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	0.000702 (J)			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	0.000732 (J)	0.00064 (J)		
7/18/2018					0.000679 (J)		
8/6/2018					0.000536 (J)		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	0.000587 (J)			
9/5/2018					0.000479 (J)		
9/24/2018					0.00039 (J)		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	0.000552 (J)			
10/24/2018					0.000436 (J)	0.000307 (J)	<0.0002
11/14/2018						0.000417 (J)	<0.0002
11/28/2018						0.000387 (J)	<0.0002
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				0.000661 (J)	0.000307 (J)	0.000317 (J)	<0.0002
12/18/2018						0.000438 (J)	<0.0002
1/3/2019						0.000703 (J)	<0.0002
1/24/2019						0.000736 (J)	<0.0002
2/5/2019	<0.0002				0.000515 (J)	0.00101	<0.0002
2/6/2019		<0.0002	<0.0002	0.000583 (J)			
6/24/2019						0.000686 (J)	
8/19/2019						0.000499 (J)	<0.0002
8/20/2019					0.000622 (J)		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	0.000755 (J)			
4/14/2020			<0.0002	0.000425 (J)			
4/15/2020	<0.0002	<0.0002				0.000697 (J)	
4/16/2020					0.00101		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				0.000584 (J)	0.000507 (J)	
8/26/2020		<0.0002	<0.0002	0.000618 (J)			
3/16/2021	0.000102 (J)						
3/22/2021					0.000407	0.000852	<0.0002
3/23/2021		<0.0002	<0.0002	0.000405			
10/5/2021	0.0001 (J)			0.00037			
10/6/2021						0.00068	<0.0002
10/11/2021		<0.0002					
10/12/2021			<0.0002		0.00059		
5/9/2022					0.00063		<0.0002
5/10/2022	0.00022	<0.0002		0.00033			
5/17/2022			<0.0002			0.00108	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0002				
2/6/2018			<0.0002				
4/23/2018			<0.0002				
6/27/2018			<0.0002				
8/7/2018			<0.0002				
10/22/2018			<0.0002				
12/4/2018			<0.0002				
2/5/2019			<0.0002				
8/20/2019			<0.0002				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		<0.0002				<0.0002
8/25/2020	<0.0002		<0.0002				<0.0002
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							<0.0002
3/23/2021		<0.0002		<0.0002			
3/24/2021			6.88E-05 (J)				
10/6/2021					<0.0002		<0.0002
10/11/2021		0.00012 (J)	<0.0002	<0.0002		<0.0002	
10/12/2021	<0.0002						
5/10/2022	<0.0002						
5/16/2022		0.00015 (J)	<0.0002				<0.0002
5/17/2022				<0.0002	<0.0002	<0.0002	

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		0.000438 (J)			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		0.00039					
3/23/2021							9.7E-05 (J)
3/24/2021			<0.0002	<0.0002			
3/30/2021	<0.0002						
10/5/2021		0.00021	<0.0002		<0.0002	<0.0002	<0.0002
10/11/2021				<0.0002			
10/12/2021	<0.0002						
5/9/2022					<0.0002		
5/10/2022		0.00035				<0.0002	<0.0002
5/11/2022				<0.0002			
5/16/2022	<0.0002		<0.0002				

Time Series

Constituent: Cadmium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		0.000304 (J)	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					<0.0002	<0.0002
3/17/2021				<0.0002		
3/23/2021	8.32E-05 (J)	<0.0002				
3/24/2021			<0.0002			
10/5/2021			<0.0002	<0.0002		
10/12/2021	<0.0002	<0.0002			8E-05 (J)	<0.0002
5/9/2022			<0.0002	<0.0002		
5/10/2022					<0.0002	<0.0002
5/11/2022	7E-05 (J)	<0.0002				

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	271	42	70	49			
2/6/2018	275						
2/7/2018		47.6	72.4				
2/8/2018				50			
4/23/2018	269						
4/24/2018		50.1	72.3	50.5			
6/26/2018	268						
6/27/2018		37.1	73.1	56.3	16.6		
7/18/2018					15.3		
8/6/2018					13.8		
8/7/2018	259	37.4					
8/8/2018			76	65.7			
9/5/2018					12.1		
9/24/2018					11.8		
10/22/2018	240	36.3					
10/23/2018			70.2	68.3			
10/24/2018					10.2	18	28.3
11/14/2018						14.9	27.5
11/28/2018						14.8	20.7
12/4/2018	254	42.1	74				
12/5/2018				64.3	9.14	14.8	25.3
12/18/2018						16.4	20.9
1/3/2019						19.7	18.5
1/24/2019						19.6	17
2/5/2019	292				15.1	20.8	17.1
2/6/2019		41.3	73.1	52.2			
2/26/2019	254	53.3					
2/27/2019			82.2	60.2			
2/28/2019					21.4	21.5	18.6
6/24/2019						18.4	
8/19/2019						12.8	25.3
8/20/2019					14.4		
8/21/2019	272						
8/22/2019		38.5	133	89.4			
4/14/2020			82.4	40			
4/15/2020	231	54.1				13.1	
4/16/2020					20.1		30.7
8/24/2020							30.8
8/25/2020	218				13.1	12.2	
8/26/2020		37.8	111	68.4			
3/16/2021	218						
3/22/2021					12.2	18.4	31
3/23/2021		57	75.9	42			
10/5/2021	198			55.8			
10/6/2021						13.4	31
10/11/2021		38.2					
10/12/2021			78.6		11.8		
5/9/2022					14.5		28.4
5/10/2022	166	42.2		48.2			
5/17/2022			80.6			19.7	

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			128				
2/6/2018			130				
4/23/2018			95.9				
6/27/2018			99.4				
8/7/2018			107				
10/22/2018			107				
12/4/2018			120				
2/5/2019			80.6				
2/26/2019			79.6				
8/20/2019			92.3				
4/14/2020		32.9		51.5			
4/15/2020	19.1		69.2				5
8/25/2020	14.9		80.5				4.97
8/26/2020		39.3		47.6			
3/16/2021	5.77						
3/22/2021							5.71
3/23/2021		31.7		57.6			
3/24/2021			61.5				
10/6/2021					3.46		5.38
10/11/2021		40	87.1	63.4		9.35	
10/12/2021	10.3						
5/10/2022	12.4						
5/16/2022		26.9	58.2				5.22
5/17/2022				74.7	3.3	9.99	

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		125					
12/7/2017			30.1		48.2	29.8	23.4
2/6/2018		110	30.6		47.8		
2/8/2018						24.3	20.1
4/24/2018		88.8	27.8				
4/25/2018					41.8	19.8	17.4
6/26/2018			26.2			17.8	21.8
6/27/2018		80.8			36.9		
8/6/2018			27.5				
8/7/2018		88.5			37.6	18.3	
8/8/2018							25.4
10/22/2018		92.7	27.7				
10/23/2018					35.3	18.1	25.6
12/3/2018		105	32.3			16.6	
12/4/2018							19
12/5/2018					36.3		
2/5/2019		68.6	25.5		36.6	14.5	
2/6/2019							16.4
2/25/2019		70.6					
2/26/2019			26.4			16	
2/27/2019					39.6		15.6
6/18/2019		80.5					
8/20/2019		74.1	23.5		33.7	15.1	
8/21/2019							23.5
4/13/2020		69.5			43	12.5	
4/15/2020			22	23.9			14
8/24/2020					35.5		
8/26/2020		75.7	22.8	23.5		12.9	16.7
3/16/2021					38.1		
3/17/2021						11.3	
3/22/2021		64.9					
3/23/2021							12.5
3/24/2021			23.1	22.9			
3/30/2021	3.71						
10/5/2021		65.9	27.4		36	11.4	15.9
10/11/2021				23			
10/12/2021	3.96						
5/9/2022					38.4		
5/10/2022		58.5				10.8	9.95
5/11/2022				22.6			
5/16/2022	3.81		30.7				

Time Series

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	66.1	38.7				
2/8/2018	58	38.8				
4/25/2018	56.3	40.3				
6/26/2018	57.7	39.9				
6/27/2018			39.4		4.56	3.89
7/18/2018			38.4		3.92	3.8
8/7/2018			36.7			
8/8/2018	51.2	42.3			3.74	3.89
9/5/2018			43.6		3.38	3.78
9/24/2018			44.5		3.25	3.73
10/22/2018			45			
10/23/2018	50.9	39.8			3.37	3.79
12/3/2018			33.7		3.67	3.79
12/4/2018	51.9					
12/5/2018		43.8				
2/5/2019			30.1			
2/6/2019	55	34.9				
2/7/2019					2.89	3.75
2/25/2019			25.6		2.95	3.81
2/27/2019	53.4	42.5				
8/20/2019			38.3			
8/21/2019	71.5	50.9			3.04	3.71
4/13/2020			25.9	16.1		
4/14/2020	56.2	43.6				
4/15/2020					2.93	3.56
8/24/2020			29	24.8	2.94	3.45
8/26/2020	55.5	43.2				
3/16/2021					2.9	3.44
3/17/2021				5.21		
3/23/2021	48.9	38.1				
3/24/2021			22.2			
10/5/2021			25.4	17.6		
10/12/2021	66.3	35.4			2.94	3.29
5/9/2022			18.9	7.02		
5/10/2022					2.87	3.24
5/11/2022	61.9	36.9				

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.2	6.9	6.3	6.2			
2/6/2018	5.9						
2/7/2018		6.1	5.4				
2/8/2018				6.1			
4/23/2018	5.9						
4/24/2018		6.9	5.7	5.9			
6/26/2018	5.7						
6/27/2018		5.6	5.4	5.5	3.1		
7/18/2018					3.4		
8/6/2018					2.8		
8/7/2018	5.3	5.1					
8/8/2018			5.2	5.3			
9/5/2018					2.8		
9/24/2018					3.1		
10/22/2018	5.6	5.5					
10/23/2018			5.4	5.8			
10/24/2018					2.8	3.3	4
11/14/2018						3.6	3.6
11/28/2018						3.5	3.5
12/4/2018	5.8	5.6	5.3				
12/5/2018				6	2.2	3.3	3.2
12/18/2018						3.6	3.4
1/3/2019						3.4	3.2
1/24/2019						3.91	3.15
2/5/2019	5.8				3.12	3.94	2.98
2/6/2019		6.24	5.89	5.95			
2/26/2019	5.92	8.28					
2/27/2019			6.2	5.88			
2/28/2019					3.45	4.15	3.05
6/24/2019						3.36 (D)	
8/19/2019						3.42	2.8
8/20/2019					3.27		
8/21/2019	5.26						
8/22/2019		5.66	4.64	6.31			
4/14/2020			5.46	5.74			
4/15/2020	5.5	6.49				3.39	
4/16/2020					3.74		2.93
8/24/2020							2.82
8/25/2020	5.59				3.03	2.94	
8/26/2020		5.39	4.74	5.91			
3/16/2021	6.2						
3/22/2021					3.15	3.61	2.94
3/23/2021		7.14	5.54	6.3			
10/5/2021	6.1			6.26			
10/6/2021						3.17	2.98
10/11/2021		5.72					
10/12/2021			5.8		2.87		
5/9/2022					3		3.01
5/10/2022	5.97	5.72		5.64			
5/17/2022			5.92			3.58	

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			4.1				
2/6/2018			3.1				
4/23/2018			3.7				
6/27/2018			2.2				
8/7/2018			2.6				
10/22/2018			2.8				
12/4/2018			4.1				
2/5/2019			2.56				
2/26/2019			3.03				
8/20/2019			2.24				
4/14/2020		7.35		6.64			
4/15/2020	6		2.16				6.47
8/25/2020	5.79		2				6.4
8/26/2020		7.03		6.73			
3/16/2021	3.85						
3/22/2021							6.65
3/23/2021		7.11		6.33			
3/24/2021			2.29				
10/6/2021					166		6.82
10/11/2021		7.04	2.43	6.37		1.72	
10/12/2021	4.59						
5/10/2022	6.38						
5/16/2022		7.23	2.18				6.86
5/17/2022				6.22	188	1.69	

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		7.6					
12/7/2017			8.5		8.7	10	7.9
2/6/2018		7.6	8.8		8.5		
2/8/2018						9.5	6.7
4/24/2018		7.5	8.4				
4/25/2018					7.6	9.1	7
6/26/2018			8.7			9.5	7.4
6/27/2018		7.3			7.1		
8/6/2018			11				
8/7/2018		7.6			6.9	9	
8/8/2018							7.7
10/22/2018		6.9	8.6				
10/23/2018					6.7	9.9	8
12/3/2018		6.8	9.1			8.7	
12/4/2018							6.7
12/5/2018					6.7		
2/5/2019		6.95	9.81		7.24	8.73	
2/6/2019							6.84
2/25/2019		6.55					
2/26/2019			13			8.66	
2/27/2019					7.38		6.21
6/18/2019		6.62					
8/20/2019		6.07	9.62		6.53	9.55	
8/21/2019							7.35
4/13/2020		5.95			6.48	8.6	
4/15/2020			9.27	5.16			4.99
8/24/2020					6.64		
8/26/2020		5.89	8.96	5.37		9.21	6.19
3/16/2021					7.14		
3/17/2021						8.59	
3/22/2021		5.26					
3/23/2021							4.87
3/24/2021			8.61	5.55			
3/30/2021	32						
10/5/2021		5.09	9.3		6.78	9.09	6.43
10/11/2021				5.65			
10/12/2021	38						
5/9/2022					6.81		
5/10/2022		4.59				8.87	3.96
5/11/2022				5.48			
5/16/2022	43.4		8.07				

Time Series

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	5.2	7				
2/8/2018	4.1					
2/12/2018		6.6				
4/25/2018	5.3	7.1				
6/26/2018	5	6.4				
6/27/2018			3.6		4.2	4.1
7/18/2018			3.8		4.1	4.3
8/7/2018			3.3			
8/8/2018	4.8	5.5			3.3	3.8
9/5/2018			3.4		3.7	3.9
9/24/2018			3.8		3.9	4.2
10/22/2018			3.3			
10/23/2018	4.4	6.7			4	4.1
12/3/2018			3.2		3.6	3.8
12/4/2018	4.2					
12/5/2018		5.9				
2/5/2019			3.78			
2/6/2019	5.84	7.26				
2/7/2019					3.72	4.15
2/25/2019			3.66		3.95	4.2
2/27/2019	6.52	6.77				
8/20/2019			3.52			
8/21/2019	5.89	6.16			3.85	4
4/13/2020			3.36	5.42		
4/14/2020	5.21	7.27				
4/15/2020					3.83	3.71
8/24/2020			3.35	5.46	3.96	3.59
8/26/2020	5.16	6.57				
3/16/2021					3.98	3.66
3/17/2021				5.53		
3/23/2021	5.3	7.42				
3/24/2021			3.45			
10/5/2021			3.23	5.79		
10/12/2021	5.6	7.78			4.07	3.68
5/9/2022			3.46	5.51		
5/10/2022					4.12	3.68
5/11/2022	5.13	7.2				

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	<0.00102		
7/18/2018					<0.00102		
8/6/2018					<0.00102		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					<0.00102		
9/24/2018					<0.00102		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					<0.00102	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						<0.00102	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	<0.00102	<0.00102	<0.00102
12/18/2018						<0.00102	<0.00102
1/3/2019						<0.00102	<0.00102
1/24/2019						<0.00102	<0.00102
2/5/2019	<0.00102				<0.00102	<0.00102	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						0.00325 (J)	
8/19/2019						<0.00102	<0.00102
8/20/2019					<0.00102		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				<0.00102	
4/16/2020					<0.00102		0.00267 (J)
8/24/2020							<0.00102
8/25/2020	<0.00102				<0.00102	<0.00102	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	0.000376 (J)						
3/22/2021					0.000771 (J)	0.000546 (J)	0.000509 (J)
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)			
10/5/2021	0.00023 (J)			0.00034 (J)			
10/6/2021						0.00046 (J)	0.00027 (J)
10/11/2021		0.00028 (J)					
10/12/2021			0.00027 (J)		0.00059 (J)		
5/9/2022					0.00087 (J)		0.00026 (J)
5/10/2022	0.00025 (J)	0.0003 (J)		0.00041 (J)			
5/17/2022			0.00038 (J)			0.00059 (J)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	0.000363 (J)						
3/22/2021							0.000433 (J)
3/23/2021		0.000404 (J)		0.000417 (J)			
3/24/2021			0.00047 (J)				
10/6/2021					0.00111		0.00025 (J)
10/11/2021		0.00048 (J)	0.00048 (J)	0.00025 (J)		0.00041 (J)	
10/12/2021	0.00021 (J)						
5/10/2022	0.00025 (J)						
5/16/2022		0.00028 (J)	0.00034 (J)				0.00029 (J)
5/17/2022				0.00021 (J)	0.00104	0.00032 (J)	

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		0.00285 (J)					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					0.000397 (J)		
3/17/2021						0.000338 (J)	
3/22/2021		0.000293 (J)					
3/23/2021							0.000406 (J)
3/24/2021			0.000323 (J)	0.000402 (J)			
3/30/2021	0.00112						
10/5/2021		0.00023 (J)	<0.00102		0.00028 (J)	0.00025 (J)	0.00025 (J)
10/11/2021				0.00031 (J)			
10/12/2021	0.00035 (J)						
5/9/2022					0.00053 (J)		
5/10/2022		0.00029 (J)				<0.00102	0.00025 (J)
5/11/2022				0.00024 (J)			
5/16/2022	0.00026 (J)		0.00023 (J)				

Time Series

Constituent: Chromium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					<0.00102	<0.00102
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					0.000534 (J)	0.000534 (J)
3/17/2021				0.000764 (J)		
3/23/2021	0.0003 (J)	0.000422 (J)				
3/24/2021			0.000442 (J)			
10/5/2021			0.00035 (J)	0.00035 (J)		
10/12/2021	<0.00102	0.00031 (J)			0.00034 (J)	0.00031 (J)
5/9/2022			0.00027 (J)	0.00062 (J)		
5/10/2022					0.00037 (J)	0.00037 (J)
5/11/2022	0.00022 (J)	0.00021 (J)				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.00818 (J)	<0.0002	<0.0002	0.00221 (J)			
2/6/2018	0.0123						
2/7/2018		<0.0002	<0.0002				
2/8/2018				0.00221 (J)			
4/23/2018	0.0204						
4/24/2018		<0.0002	<0.0002	0.00257 (J)			
6/26/2018	0.0224						
6/27/2018		<0.0002	<0.0002	0.00266 (J)	0.0382		
7/18/2018					0.0366		
8/6/2018					0.0308		
8/7/2018	0.0193	<0.0002					
8/8/2018			<0.0002	0.00251 (J)			
9/5/2018					0.0291		
9/24/2018					0.0286		
10/22/2018	0.0243	<0.0002					
10/23/2018			<0.0002	0.00399 (J)			
10/24/2018					0.0269	0.0129	<0.0002
11/14/2018						0.0114	<0.0002
11/28/2018						0.0168	<0.0002
12/4/2018	0.0166	<0.0002	<0.0002				
12/5/2018				0.00466 (J)	0.0215	0.0161	<0.0002
12/18/2018						0.0234	<0.0002
1/3/2019						0.038	<0.0002
1/24/2019						0.04	<0.0002
2/5/2019	0.0264				0.0359	0.0538	<0.0002
2/6/2019		<0.0002	<0.0002	0.00485 (J)			
6/24/2019						0.041	
8/19/2019						0.0247	<0.0002
8/20/2019					0.0391		
8/21/2019	0.0242						
8/22/2019		<0.0002	0.00756	0.00658			
4/14/2020			<0.0002	0.0035 (J)			
4/15/2020	0.0178	<0.0002				0.0373	
4/16/2020					0.056		<0.0002
8/24/2020							<0.0002
8/25/2020	0.0193				0.0365	0.0294	
8/26/2020		<0.0002	0.00599	0.00547			
3/16/2021	0.0184						
3/22/2021					0.0262	0.0469	0.000133 (J)
3/23/2021		0.00037	0.000388	0.00378			
10/5/2021	0.0169			0.00448			
10/6/2021						0.0321	0.00013 (J)
10/11/2021		0.00089					
10/12/2021			0.00027		0.0291		
5/9/2022					0.0416		0.00011 (J)
5/10/2022	0.0136	0.00091		0.0049			
5/17/2022			0.00044			0.0563	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.0246				
2/6/2018			0.0243				
4/23/2018			0.0258				
6/27/2018			0.0362				
8/7/2018			0.0332				
10/22/2018			0.0438				
12/4/2018			0.0252				
2/5/2019			0.0362				
8/20/2019			0.0366				
4/14/2020		0.00886		0.0122			
4/15/2020	<0.0002		0.0324				<0.0002
8/25/2020	<0.0002		0.0298				<0.0002
8/26/2020		0.0101		0.0104			
3/16/2021	0.000577						
3/22/2021							<0.0002
3/23/2021		0.00674		0.0125			
3/24/2021			0.0316				
10/6/2021					0.00021		<0.0002
10/11/2021		0.00579	0.0165	0.00995		<0.0002	
10/12/2021	0.00062						
5/10/2022	0.0003						
5/16/2022		0.00485	0.0366				<0.0002
5/17/2022				0.0102	0.00019 (J)	8E-05 (J)	

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.0302					
12/7/2017			0.0252		0.00331 (J)	0.00592 (J)	<0.0002
2/6/2018		0.0371	0.0243		0.00323 (J)		
2/8/2018						0.00297 (J)	<0.0002
4/24/2018		0.0251	0.027				
4/25/2018					0.00258 (J)	<0.0002	<0.0002
6/26/2018			0.0242			<0.0002	<0.0002
6/27/2018		0.0234			0.00218 (J)		
8/6/2018			0.0205				
8/7/2018		0.0223			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		0.03	0.0259				
10/23/2018					0.0023 (J)	<0.0002	<0.0002
12/3/2018		0.0238	0.0228			<0.0002	
12/4/2018							<0.0002
12/5/2018					0.00233 (J)		
2/5/2019		0.0232	0.0263		0.0021 (J)	<0.0002	
2/6/2019							<0.0002
6/18/2019		0.0263					
8/20/2019		0.0257	0.0293		0.00223 (J)	<0.0002	
8/21/2019							<0.0002
4/13/2020		0.0209			<0.0002	<0.0002	
4/15/2020			0.0252	<0.0002			<0.0002
8/24/2020					0.00222 (J)		
8/26/2020		0.0191	0.0231	<0.0002		<0.0002	<0.0002
3/16/2021					0.00136		
3/17/2021						0.00102	
3/22/2021		0.0183					
3/23/2021							0.00102
3/24/2021			0.0268	8.16E-05 (J)			
3/30/2021	0.000116 (J)						
10/5/2021		0.016	0.0238		0.00116	0.00104	0.00018 (J)
10/11/2021				<0.0002			
10/12/2021	<0.0002						
5/9/2022					0.00101		
5/10/2022		0.0147				0.00114	0.0004
5/11/2022				<0.0002			
5/16/2022	<0.0002		0.0289				

Time Series

Constituent: Cobalt (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.00212 (J)	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	0.00204 (J)	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		0.00341 (J)	<0.0002
7/18/2018			<0.0002		0.00341 (J)	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			0.00221 (J)	<0.0002
9/5/2018			<0.0002		0.00202 (J)	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		0.00227 (J)	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	0.00232 (J)	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	0.00303 (J)	<0.0002			0.00225 (J)	<0.0002
4/13/2020			<0.0002	0.00489 (J)		
4/14/2020	0.00385 (J)	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	0.00237 (J)	<0.0002	<0.0002
8/26/2020	0.00388 (J)	<0.0002				
3/16/2021					0.000384	0.000108 (J)
3/17/2021				0.00616		
3/23/2021	0.003	0.00103				
3/24/2021			<0.0002			
10/5/2021			0.00044	0.00287		
10/12/2021	0.00298	0.00113			8E-05 (J)	0.00014 (J)
5/9/2022			0.00014 (J)	0.00691		
5/10/2022					0.00015 (J)	0.00012 (J)
5/11/2022	0.00461	0.00091				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.694	0.585	0.891	0.435 (U)			
2/6/2018	0.641						
2/7/2018		0.474	0.786				
2/8/2018				0.477			
4/23/2018	-0.0527 (U)						
4/24/2018		0.463 (U)	0.935	0.695			
6/26/2018	0.162 (U)						
6/27/2018		0.678	0.537	0.183 (U)	0.616		
7/18/2018					0.859		
8/6/2018					0.654		
8/7/2018	0.87	0.495 (U)					
8/8/2018			1.28	0.817			
9/5/2018					0.855		
9/24/2018					0.787		
10/22/2018	0.691	0.36 (U)					
10/23/2018			1.3	0.796			
10/24/2018					1.14	0.564	0.694
11/14/2018						-0.0027 (U)	0.398 (U)
11/28/2018						0.222 (U)	0.428 (U)
12/4/2018	0.213 (U)	0.407 (U)	1.05				
12/5/2018				0.498 (U)	0.64	0.288 (U)	0.302 (U)
2/5/2019	0.637				0.873	0.431 (U)	0.307 (U)
2/6/2019		0.537	0.779	-0.0241 (U)			
8/19/2019						0.377 (U)	0.683
8/20/2019					0.774		
8/21/2019	0.643 (U)						
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)			
4/14/2020			0.922 (U)	0.643 (U)			
4/15/2020	0.538 (U)	0.64 (U)				0.449 (U)	
4/16/2020					0.865		0.603
8/24/2020							0.404 (U)
8/25/2020	0.502 (U)				0.976	0.851	
8/26/2020		0.221 (U)	1.28	1.31			
3/16/2021	0.722 (U)						
3/22/2021					1.04	0.942 (U)	0.497 (U)
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)			
10/5/2021	1.21			1.48			
10/6/2021						1.16 (U)	2.01
10/11/2021		6.52					
10/12/2021			1.02 (U)		1.61		
5/9/2022					1.31		0.56 (U)
5/10/2022	0.761 (U)	0.421 (U)		0.531 (U)			
5/17/2022			1.01 (U)			1.01	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.772				
2/6/2018			0.679				
4/23/2018			0.447 (U)				
6/27/2018			0.117 (U)				
8/7/2018			1.22				
10/22/2018			0.996				
12/4/2018			0.739				
2/5/2019			1.09				
8/20/2019			0.553 (U)				
4/14/2020		42.6		0.0962 (U)			
4/15/2020	0.419 (U)		0.182 (U)				0.231 (U)
6/1/2020		0.215 (U)					
8/25/2020	1.45		0.43 (U)				0.807
8/26/2020		0.265 (U)		0.413 (U)			
3/16/2021	0.405 (U)						
3/22/2021							0.58 (U)
3/23/2021		0.562 (U)		0.847 (U)			
3/24/2021			0.769 (U)				
10/6/2021					1.78		0.746 (U)
10/11/2021		0.202 (U)	2.38	1.09 (U)		1.29	
10/12/2021	0.383 (U)						
5/10/2022	0.576 (U)						
5/16/2022		0.471 (U)	1.06				0.285 (U)
5/17/2022				0.551 (U)	0.4 (U)	0.306 (U)	

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.643					
12/7/2017			1.04		0.885	0.394 (U)	0.895
2/6/2018		0.209 (U)	0.989		0.524		
2/8/2018						0.489	0.322 (U)
4/24/2018		0.596	0.405 (U)				
4/25/2018					0.341 (U)	-0.0902 (U)	0.0097 (U)
6/26/2018			1.03			0.245 (U)	0.587
6/27/2018		0.363 (U)			0.546		
8/6/2018			0.622				
8/7/2018		0.788			1.09	0.439 (U)	
8/8/2018							0.364 (U)
10/22/2018		0.749	1.06				
10/23/2018					1.01	0.243 (U)	0.703
12/3/2018		0.749	0.697			0.304 (U)	
12/4/2018							0.325 (U)
12/5/2018					0.876		
2/5/2019		0.299 (U)	0.467 (U)		0.551 (U)	0.196 (U)	
2/6/2019							0.0774 (U)
8/20/2019		0.709 (U)	0.814		0.206 (U)	-0.086 (U)	
8/21/2019							-0.0134 (U)
4/13/2020		0.942 (U)			1.19	0.0901 (U)	
4/15/2020			-0.0841 (U)	0.329 (U)			0.526 (U)
8/24/2020					0.482 (U)		
8/26/2020		0.177 (U)	0.26 (U)	0.839		0.416 (U)	0.691 (U)
3/16/2021					0.709 (U)		
3/17/2021						0.539 (U)	
3/22/2021		0.263 (U)					
3/23/2021							0.45 (U)
3/24/2021			0.664 (U)	0.725 (U)			
3/30/2021	0.185 (U)						
10/5/2021		3.21	1.75		1.44	1.36	1.27
10/11/2021				1.58			
10/12/2021	0.323 (U)						
5/9/2022					1.16		
5/10/2022		0.189 (U)				0.0979 (U)	0.599 (U)
5/11/2022				0.576 (U)			
5/16/2022	0.253 (U)		0.978				

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	7.45 (o)	0.226 (U)				
2/8/2018	0.549	0.071 (U)				
4/25/2018	0.65	0.569				
6/26/2018	0.436 (U)	0.43 (U)				
6/27/2018			0.188 (U)		0.259 (U)	0.231 (U)
7/18/2018			0.314 (U)		0.434	0.676
8/7/2018			0.279 (U)			
8/8/2018	0.486 (U)	0.656			0.763	0.496
9/5/2018			0.589		0.631	0.62
9/24/2018			0.772		0.588	-0.12 (U)
10/22/2018			0.621			
10/23/2018	0.319 (U)	0.395 (U)			0.383 (U)	0.352 (U)
12/3/2018			0.188 (U)		0.736	0.238 (U)
12/4/2018	0.875					
12/5/2018		0.52 (U)				
2/5/2019			0.274 (U)			
2/6/2019	0.378 (U)	0.244 (U)				
2/7/2019					0.0202 (U)	0.395 (U)
8/20/2019			0.663			
8/21/2019	0.552 (U)	1.53 (U)			0.442 (U)	-0.00256 (U)
4/13/2020			-0.129 (U)	0.472 (U)		
4/14/2020	0.641 (U)	0.119 (U)				
4/15/2020					0.432 (U)	0.000738 (U)
8/24/2020			0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)
8/26/2020	0.339 (U)	1.18				
3/16/2021					0.32 (U)	0.589 (U)
3/17/2021				0.756 (U)		
3/23/2021	0.662 (U)	0.694 (U)				
3/24/2021			0.245 (U)			
10/5/2021			2.07	1.13		
10/12/2021	0.291 (U)	0.311 (U)			0.963 (U)	1.57
5/9/2022			0.784 (U)	0.352 (U)		
5/10/2022					0.659 (U)	0.468 (U)
5/11/2022	0.475 (U)	0.605 (U)				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	0.1	0.09 (J)	0.06 (J)	<0.125			
2/6/2018	0.08 (J)						
2/7/2018		0.08 (J)	0.05 (J)				
2/8/2018				<0.125			
4/23/2018	0.07 (J)						
4/24/2018		0.08 (J)	0.05 (J)	<0.125			
6/26/2018	0.08 (J)						
6/27/2018		0.09 (J)	0.06 (J)	<0.125	0.18		
7/18/2018					0.23		
8/6/2018					0.23		
8/7/2018	0.07 (J)	0.04 (J)					
8/8/2018			0.06 (J)	<0.125			
9/5/2018					0.22		
9/24/2018					0.2		
10/22/2018	0.07 (J)	0.1					
10/23/2018			0.06 (J)	0.04 (J)			
10/24/2018					0.14	0.11	0.23
11/14/2018						0.1	0.2
11/28/2018						0.1	0.19
12/4/2018	0.04 (J)	0.07 (J)	<0.125				
12/5/2018				<0.125	0.07 (J)	0.11	0.19
12/18/2018						0.14	0.15
1/3/2019						0.16	0.19
1/24/2019						<0.125	0.168
2/5/2019	0.0525 (J)				<0.125	<0.125	0.192
2/6/2019		0.107	0.0678 (J)	<0.125			
2/26/2019	<0.125	0.0813 (J)					
2/27/2019			0.0985 (J)	<0.125			
2/28/2019					<0.125	<0.125	0.182
6/24/2019						<0.125 (D)	
8/19/2019						<0.125	0.187
8/20/2019					<0.125		
8/21/2019	<0.125						
8/22/2019		0.084 (J)	<0.125	<0.125			
4/14/2020			0.0878 (J)	<0.125			
4/15/2020	<0.125	0.112				<0.125	
4/16/2020					<0.125		0.166
8/24/2020							0.163
8/25/2020	<0.125				<0.125	0.0863 (J)	
8/26/2020		0.0997 (J)	<0.125	<0.125			
3/16/2021	<0.125						
3/22/2021					<0.125	<0.125	0.18
3/23/2021		0.101	0.0819 (J)	<0.125			
10/5/2021	0.0601 (J)			<0.125			
10/6/2021						<0.125	0.175
10/11/2021		0.201					
10/12/2021			0.134		<0.125		
5/9/2022					<0.125		0.191
5/10/2022	<0.125	0.0918 (J)		<0.125			
5/17/2022			<0.125			<0.125	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.3				
2/6/2018			0.27				
4/23/2018			0.19				
6/27/2018			0.28				
8/7/2018			0.24				
10/22/2018			0.24				
12/4/2018			0.15				
2/5/2019			0.207				
2/26/2019			0.264				
8/20/2019			0.252				
4/14/2020		<0.125		0.125			
4/15/2020	<0.125		0.21				2.51
8/25/2020	<0.125		0.273				2.4
8/26/2020		<0.125		0.103			
3/16/2021	<0.125						
3/22/2021							2.33
3/23/2021		<0.125		0.108			
3/24/2021			0.194				
10/6/2021					8.34		2.56
10/11/2021		0.0779 (J)	0.283	0.127		1.43	
10/12/2021	<0.125						
5/10/2022	<0.125						
5/16/2022		<0.125	0.264				2.59
5/17/2022				<0.125	8.22	1.27	

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		0.13					
12/7/2017			0.25		0.06 (J)	0.06 (J)	0.09 (J)
2/6/2018		0.08 (J)	0.24		0.05 (J)		
2/8/2018						0.04 (J)	0.07 (J)
4/24/2018		0.05 (J)	0.2				
4/25/2018					0.05 (J)	0.04 (J)	0.07 (J)
6/26/2018			0.22			0.05 (J)	0.09 (J)
6/27/2018		0.07 (J)			0.06 (J)		
8/6/2018			0.22				
8/7/2018		0.09 (J)			0.06 (J)	0.05 (J)	
8/8/2018							0.1
10/22/2018		0.11	0.24				
10/23/2018					0.07 (J)	0.06 (J)	0.1
12/3/2018		0.08 (J)	0.22			<0.125	
12/4/2018							0.06 (J)
12/5/2018					0.04 (J)		
2/5/2019		0.064 (J)	0.259		0.0651 (J)	0.0581 (J)	
2/6/2019							<0.125
2/25/2019		<0.125					
2/26/2019			0.246			0.0816 (J)	
2/27/2019					0.0578 (J)		0.0824 (J)
6/18/2019		0.0664 (J)					
8/20/2019		0.0592 (J)	0.197		0.0567 (J)	<0.125	
8/21/2019							0.068 (J)
4/13/2020		<0.125			0.0688 (J)	<0.125	
4/15/2020			0.238	0.218			0.0775 (J)
8/24/2020					0.0607 (J)		
8/26/2020		<0.125	0.251	0.217		<0.125	<0.125
3/16/2021					0.065 (J)		
3/17/2021						<0.125	
3/22/2021		<0.125					
3/23/2021							<0.125
3/24/2021			0.227	0.212			
3/30/2021	6.09						
10/5/2021		<0.125	0.214		0.122	<0.125	0.0933 (J)
10/11/2021				0.23			
10/12/2021	5.97						
5/9/2022					0.0682 (J)		
5/10/2022		0.0714 (J)				<0.125	0.0627 (J)
5/11/2022				0.175			
5/16/2022	6.14		0.17				

Time Series

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	0.14	0.12				
2/8/2018	0.11					
2/12/2018		0.11				
4/25/2018	0.09 (J)	0.12				
6/26/2018	0.1	0.13				
6/27/2018			0.13		0.05 (J)	0.04 (J)
7/18/2018			0.11		0.04 (J)	0.04 (J)
8/7/2018			0.11			
8/8/2018	0.1	0.12			0.04 (J)	0.04 (J)
9/5/2018			0.13		0.04 (J)	0.04 (J)
9/24/2018			0.13		0.04 (J)	0.04 (J)
10/22/2018			0.13			
10/23/2018	0.11	0.13			0.04 (J)	0.04 (J)
12/3/2018			0.08 (J)		<0.125	<0.125
12/4/2018	0.08 (J)					
12/5/2018		0.04 (J)				
2/5/2019			0.0934 (J)			
2/6/2019	<0.125	<0.125				
2/7/2019					<0.125	<0.125
2/25/2019			<0.125		<0.125	<0.125
2/27/2019	0.108	0.147				
8/20/2019			0.0889 (J)			
8/21/2019	0.0648 (J)	0.0984 (J)			<0.125	<0.125
4/13/2020			0.103	<0.125		
4/14/2020	0.0845 (J)	0.133				
4/15/2020					<0.125	<0.125
8/24/2020			0.114	<0.125	<0.125	<0.125
8/26/2020	0.0732 (J)	0.13				
3/16/2021					<0.125	<0.125
3/17/2021				<0.125		
3/23/2021	0.0802 (J)	0.132				
3/24/2021			0.0725 (J)			
10/5/2021			<0.125	<0.125		
10/12/2021	0.123	0.147			<0.125	<0.125
5/9/2022			0.0824 (J)	<0.125		
5/10/2022					<0.125	<0.125
5/11/2022	0.0695 (J)	0.108 (J)				

Time Series

Constituent: Lead (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	<0.0002			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				<0.0002			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	<0.0002			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	<0.0002	0.00158 (J)		
7/18/2018					0.00152 (J)		
8/6/2018					0.00143 (J)		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	<0.0002			
9/5/2018					0.00118 (J)		
9/24/2018					0.00156 (J)		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	<0.0002			
10/24/2018					0.00121 (J)	<0.0002	<0.0002
11/14/2018						<0.0002	<0.0002
11/28/2018						<0.0002	<0.0002
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				<0.0002	0.00117 (J)	<0.0002	<0.0002
12/18/2018						<0.0002	<0.0002
1/3/2019						0.001 (J)	<0.0002
1/24/2019						0.00114 (J)	<0.0002
2/5/2019	<0.0002				0.00156 (J)	0.00135 (J)	<0.0002
2/6/2019		<0.0002	<0.0002	<0.0002			
6/24/2019						0.00125 (J)	
8/19/2019						<0.0002	<0.0002
8/20/2019					0.00176 (J)		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	<0.0002			
4/14/2020			<0.0002	<0.0002			
4/15/2020	<0.0002	<0.0002				<0.0002	
4/16/2020					0.00258 (J)		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				0.0018 (J)	0.0011 (J)	
8/26/2020		<0.0002	<0.0002	<0.0002			
3/16/2021	<0.0002						
3/22/2021					0.00143	0.0016	<0.0002
3/23/2021		<0.0002	<0.0002	<0.0002			
10/5/2021	<0.0002			<0.0002			
10/6/2021						0.00116	<0.0002
10/11/2021		<0.0002					
10/12/2021			<0.0002		0.00156		
5/9/2022					0.00194		<0.0002
5/10/2022	<0.0002	<0.0002		<0.0002			
5/17/2022			<0.0002			0.00178	

Time Series

Constituent: Lead (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0002				
2/6/2018			<0.0002				
4/23/2018			<0.0002				
6/27/2018			<0.0002				
8/7/2018			<0.0002				
10/22/2018			<0.0002				
12/4/2018			<0.0002				
2/5/2019			<0.0002				
8/20/2019			<0.0002				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		<0.0002				<0.0002
8/25/2020	<0.0002		<0.0002				<0.0002
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							<0.0002
3/23/2021		0.000201 (J)		<0.0002			
3/24/2021			<0.0002				
10/6/2021					0.00022		<0.0002
10/11/2021		0.00016 (J)	9E-05 (J)	8E-05 (J)		<0.0002	
10/12/2021	<0.0002						
5/10/2022	<0.0002						
5/16/2022		0.00015 (J)	<0.0002				<0.0002
5/17/2022				<0.0002	0.00022	<0.0002	

Time Series

Constituent: Lead (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		<0.0002					
3/23/2021							<0.0002
3/24/2021			<0.0002	<0.0002			
3/30/2021	<0.0002						
10/5/2021		<0.0002	<0.0002		<0.0002	<0.0002	<0.0002
10/11/2021				<0.0002			
10/12/2021	<0.0002						
5/9/2022					<0.0002		
5/10/2022		<0.0002				<0.0002	<0.0002
5/11/2022				<0.0002			
5/16/2022	<0.0002		<0.0002				

Time Series

Constituent: Lead (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					0.00013 (J)	8.35E-05 (J)
3/17/2021				0.000191 (J)		
3/23/2021	<0.0002	<0.0002				
3/24/2021			<0.0002			
10/5/2021			<0.0002	0.00012 (J)		
10/12/2021	<0.0002	<0.0002			<0.0002	0.00012 (J)
5/9/2022			<0.0002	0.00018 (J)		
5/10/2022					<0.0002	0.00012 (J)
5/11/2022	<0.0002	<0.0002				

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.02	<0.02	<0.02	<0.02			
2/6/2018	<0.02						
2/7/2018		<0.02	<0.02				
2/8/2018				<0.02			
4/23/2018	<0.02						
4/24/2018		<0.02	<0.02	<0.02			
6/26/2018	<0.02						
6/27/2018		<0.02	<0.02	<0.02	<0.02		
7/18/2018					<0.02		
8/6/2018					<0.02		
8/7/2018	<0.02	<0.02					
8/8/2018			<0.02	<0.02			
9/5/2018					<0.02		
9/24/2018					<0.02		
10/22/2018	<0.02	<0.02					
10/23/2018			<0.02	<0.02			
10/24/2018					<0.02	<0.02	<0.02
11/14/2018						<0.02	<0.02
11/28/2018						<0.02	0.0111 (J)
12/4/2018	<0.02	<0.02	<0.02				
12/5/2018				<0.02	<0.02	<0.02	0.0124 (J)
12/18/2018						<0.02	0.0121 (J)
1/3/2019						<0.02	0.0137 (J)
1/24/2019						<0.02	0.0134 (J)
2/5/2019	<0.02				<0.02	<0.02	0.0126 (J)
2/6/2019		<0.02	<0.02	<0.02			
6/24/2019						<0.02	
8/19/2019						<0.02	<0.02
8/20/2019					<0.02		
8/21/2019	<0.02						
8/22/2019		<0.02	<0.02	<0.02			
4/14/2020			<0.02	<0.02			
4/15/2020	<0.02	<0.02				<0.02	
4/16/2020					<0.02		0.0127 (J)
8/24/2020							<0.02
8/25/2020	<0.02				<0.02	<0.02	
8/26/2020		<0.02	<0.02	<0.02			
3/16/2021	<0.02						
3/22/2021					<0.02	<0.02	0.0083 (J)
3/23/2021		<0.02	<0.02	<0.02			
10/5/2021	<0.02			<0.02			
10/6/2021						<0.02	0.00881 (J)
10/11/2021		<0.02					
10/12/2021			<0.02		<0.02		
5/9/2022					<0.02		0.00859 (J)
5/10/2022	<0.02	<0.02		<0.02			
5/17/2022			<0.02			<0.02	

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.092				
2/6/2018			0.0817				
4/23/2018			0.051				
6/27/2018			0.0734				
8/7/2018			0.0764				
10/22/2018			0.0804				
12/4/2018			0.0474				
2/5/2019			0.0545				
8/20/2019			0.0583				
4/14/2020		<0.02		<0.02			
4/15/2020	<0.02		0.0406				0.0783
7/1/2020							0.069
8/25/2020	<0.02		0.041				0.0666
8/26/2020		<0.02		<0.02			
3/16/2021	<0.02						
3/22/2021							0.0666
3/23/2021		<0.02		<0.02			
3/24/2021			0.0318				
10/6/2021					0.227		0.0685
10/11/2021		<0.02	0.0225	<0.02		0.0544	
10/12/2021	<0.02						
5/10/2022	<0.02						
5/16/2022		<0.02	0.0271				0.0612
5/17/2022				<0.02	0.196	0.0499	

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.02					
12/7/2017			<0.02		<0.02	<0.02	<0.02
2/6/2018		<0.02	<0.02		<0.02		
2/8/2018						<0.02	<0.02
4/24/2018		<0.02	<0.02				
4/25/2018					<0.02	<0.02	<0.02
6/26/2018			<0.02			<0.02	<0.02
6/27/2018		<0.02			<0.02		
8/6/2018			<0.02				
8/7/2018		<0.02			<0.02	<0.02	
8/8/2018							<0.02
10/22/2018		<0.02	<0.02				
10/23/2018					<0.02	<0.02	<0.02
12/3/2018		<0.02	<0.02			<0.02	
12/4/2018							<0.02
12/5/2018					<0.02		
2/5/2019		<0.02	<0.02		<0.02	<0.02	
2/6/2019							<0.02
6/18/2019		<0.02					
8/20/2019		<0.02	<0.02		<0.02	<0.02	
8/21/2019							<0.02
4/13/2020		<0.02			<0.02	<0.02	
4/15/2020			<0.02	0.0219			<0.02
8/24/2020					<0.02		
8/26/2020		<0.02	<0.02	0.0203		<0.02	<0.02
3/16/2021					<0.02		
3/17/2021						<0.02	
3/22/2021		<0.02					
3/23/2021							<0.02
3/24/2021			<0.02	0.0203			
3/30/2021	0.13						
10/5/2021		<0.02	<0.02		<0.02	<0.02	<0.02
10/11/2021				0.0198 (J)			
10/12/2021	0.129						
5/9/2022					<0.02		
5/10/2022		<0.02				<0.02	<0.02
5/11/2022				0.0187 (J)			
5/16/2022	0.111		<0.02				

Time Series

Constituent: Lithium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.02	<0.02				
2/8/2018	<0.02	<0.02				
4/25/2018	<0.02	<0.02				
6/26/2018	<0.02	<0.02				
6/27/2018			<0.02		<0.02	<0.02
7/18/2018			<0.02		<0.02	<0.02
8/7/2018			<0.02			
8/8/2018	<0.02	<0.02			<0.02	<0.02
9/5/2018			<0.02		<0.02	<0.02
9/24/2018			<0.02		<0.02	<0.02
10/22/2018			<0.02			
10/23/2018	<0.02	<0.02			<0.02	<0.02
12/3/2018			<0.02		<0.02	<0.02
12/4/2018	<0.02					
12/5/2018		<0.02				
2/5/2019			<0.02			
2/6/2019	<0.02	<0.02				
2/7/2019					<0.02	<0.02
8/20/2019			<0.02			
8/21/2019	<0.02	<0.02			<0.02	<0.02
4/13/2020			<0.02	<0.02		
4/14/2020	<0.02	<0.02				
4/15/2020					<0.02	<0.02
8/24/2020			<0.02	<0.02	<0.02	<0.02
8/26/2020	<0.02	<0.02				
3/16/2021					<0.02	<0.02
3/17/2021				<0.02		
3/23/2021	<0.02	<0.02				
3/24/2021			<0.02			
10/5/2021			<0.02	<0.02		
10/12/2021	<0.02	<0.02			<0.02	<0.02
5/9/2022			<0.02	<0.02		
5/10/2022					<0.02	<0.02
5/11/2022	<0.02	<0.02				

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0005	<0.0005	<0.0005	<0.0005			
2/6/2018	<0.0005						
2/7/2018		<0.0005	<0.0005				
2/8/2018				<0.0005			
4/23/2018	<0.0005						
4/24/2018		<0.0005	<0.0005	<0.0005			
6/26/2018	<0.0005						
6/27/2018		<0.0005	<0.0005	<0.0005	0.000661		
7/18/2018					0.000398 (J)		
8/6/2018					0.00042 (J)		
8/7/2018	<0.0005	<0.0005					
8/8/2018			<0.0005	<0.0005			
9/5/2018					0.00037 (J)		
9/24/2018					0.000329 (J)		
10/22/2018	<0.0005	<0.0005					
10/23/2018			<0.0005	<0.0005			
10/24/2018					<0.0005	<0.0005	<0.0005
11/14/2018						<0.0005	<0.0005
11/28/2018						<0.0005	<0.0005
12/4/2018	<0.0005	0.000302 (J)	<0.0005				
12/5/2018				<0.0005	0.000253 (J)	<0.0005	<0.0005
12/18/2018						<0.0005	<0.0005
1/3/2019						<0.0005	<0.0005
1/24/2019						0.000411 (J)	<0.0005
2/5/2019	<0.0005				0.000664	0.000473 (J)	<0.0005
2/6/2019		<0.0005	<0.0005	<0.0005			
8/19/2019						<0.0005	<0.0005
8/20/2019					0.000301 (J)		
8/21/2019	<0.0005						
8/22/2019		<0.0005	<0.0005	<0.0005			
4/14/2020			<0.0005	<0.0005			
4/15/2020	<0.0005	<0.0005				<0.0005	
4/16/2020					0.000558		<0.0005
8/24/2020							<0.0005
8/25/2020	<0.0005				<0.0005	<0.0005	
8/26/2020		<0.0005	<0.0005	<0.0005			
3/16/2021	<0.0005						
3/22/2021					0.000363 (J)	0.000775	<0.0005
3/23/2021		<0.0005	<0.0005	<0.0005			
10/5/2021	<0.0005			<0.0005			
10/6/2021						<0.0005	<0.0005
10/11/2021		<0.0005					
10/12/2021			<0.0005		<0.0005		
5/9/2022					0.00039 (J)		<0.0005
5/10/2022	<0.0005	<0.0005		<0.0005			
5/17/2022			<0.0005			<0.0005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0005				
2/6/2018			<0.0005				
4/23/2018			<0.0005				
6/27/2018			<0.0005				
8/7/2018			<0.0005				
10/22/2018			<0.0005				
12/4/2018			<0.0005				
2/5/2019			<0.0005				
8/20/2019			<0.0005				
4/14/2020		<0.0005		<0.0005			
4/15/2020	<0.0005		<0.0005				<0.0005
8/25/2020	<0.0005		<0.0005				<0.0005
8/26/2020		<0.0005		<0.0005			
3/16/2021	<0.0005						
3/22/2021							<0.0005
3/23/2021		<0.0005		<0.0005			
3/24/2021			<0.0005				
10/6/2021					<0.0005		<0.0005
10/11/2021		<0.0005	<0.0005	<0.0005		<0.0005	
10/12/2021	<0.0005						
5/10/2022	<0.0005						
5/16/2022		<0.0005	<0.0005				<0.0005
5/17/2022				<0.0005	<0.0005	<0.0005	

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0005					
12/7/2017			<0.0005		<0.0005	<0.0005	<0.0005
2/6/2018		<0.0005	<0.0005		<0.0005		
2/8/2018						<0.0005	<0.0005
4/24/2018		<0.0005	<0.0005				
4/25/2018					<0.0005	<0.0005	<0.0005
6/26/2018			<0.0005			<0.0005	<0.0005
6/27/2018		<0.0005			<0.0005		
8/6/2018			<0.0005				
8/7/2018		<0.0005			<0.0005	<0.0005	
8/8/2018							<0.0005
10/22/2018		<0.0005	<0.0005				
10/23/2018					<0.0005	<0.0005	<0.0005
12/3/2018		<0.0005	<0.0005			<0.0005	
12/4/2018							0.00034 (J)
12/5/2018					<0.0005		
2/5/2019		<0.0005	<0.0005		<0.0005	<0.0005	
2/6/2019							<0.0005
8/20/2019		<0.0005	<0.0005		<0.0005	<0.0005	
8/21/2019							<0.0005
4/13/2020		<0.0005			<0.0005	<0.0005	
4/15/2020			<0.0005	<0.0005			<0.0005
8/24/2020					<0.0005		
8/26/2020		<0.0005	<0.0005	<0.0005		<0.0005	<0.0005
3/16/2021					<0.0005		
3/17/2021						<0.0005	
3/22/2021		<0.0005					
3/23/2021							<0.0005
3/24/2021			<0.0005	<0.0005			
3/30/2021	<0.0005						
10/5/2021		<0.0005	<0.0005		<0.0005	<0.0005	<0.0005
10/11/2021				<0.0005			
10/12/2021	<0.0005						
5/9/2022					<0.0005		
5/10/2022		<0.0005				<0.0005	<0.0005
5/11/2022				<0.0005			
5/16/2022	<0.0005		<0.0005				

Time Series

Constituent: Mercury (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0005	<0.0005				
2/8/2018	<0.0005	<0.0005				
4/25/2018	<0.0005	<0.0005				
6/26/2018	<0.0005	<0.0005				
6/27/2018			<0.0005		<0.0005	<0.0005
7/18/2018			<0.0005		<0.0005	<0.0005
8/7/2018			<0.0005			
8/8/2018	<0.0005	<0.0005			<0.0005	<0.0005
9/5/2018			<0.0005		<0.0005	<0.0005
9/24/2018			<0.0005		<0.0005	<0.0005
10/22/2018			<0.0005			
10/23/2018	<0.0005	<0.0005			<0.0005	<0.0005
12/3/2018			<0.0005		<0.0005	<0.0005
12/4/2018	0.000284 (J)					
12/5/2018		<0.0005				
2/5/2019			<0.0005			
2/6/2019	<0.0005	<0.0005				
2/7/2019					<0.0005	<0.0005
8/20/2019			<0.0005			
8/21/2019	<0.0005	<0.0005			<0.0005	<0.0005
4/13/2020			<0.0005	<0.0005		
4/14/2020	<0.0005	<0.0005				
4/15/2020					<0.0005	<0.0005
8/24/2020			<0.0005	<0.0005	<0.0005	<0.0005
8/26/2020	<0.0005	<0.0005				
3/16/2021					<0.0005	<0.0005
3/17/2021				<0.0005		
3/23/2021	<0.0005	<0.0005				
3/24/2021			<0.0005			
10/5/2021			<0.0005	<0.0005		
10/12/2021	<0.0005	<0.0005			<0.0005	<0.0005
5/9/2022			<0.0005	<0.0005		
5/10/2022					<0.0005	0.00286
5/11/2022	<0.0005	<0.0005				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	<0.0002			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				<0.0002			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	<0.0002			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	<0.0002	<0.0002		
7/18/2018					<0.0002		
8/6/2018					<0.0002		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	<0.0002			
9/5/2018					<0.0002		
9/24/2018					<0.0002		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	<0.0002			
10/24/2018					<0.0002	<0.0002	0.00507 (J)
11/14/2018						<0.0002	0.00358 (J)
11/28/2018						<0.0002	0.00322 (J)
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				<0.0002	<0.0002	<0.0002	0.00256 (J)
12/18/2018						<0.0002	0.00215 (J)
1/3/2019						<0.0002	0.00257 (J)
1/24/2019						<0.0002	0.00211 (J)
2/5/2019	<0.0002				<0.0002	<0.0002	0.00205 (J)
2/6/2019		<0.0002	<0.0002	<0.0002			
6/24/2019						<0.0002	
8/19/2019						<0.0002	<0.0002
8/20/2019					<0.0002		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	<0.0002			
4/14/2020			<0.0002	<0.0002			
4/15/2020	<0.0002	<0.0002				<0.0002	
4/16/2020					<0.0002		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				<0.0002	<0.0002	
8/26/2020		<0.0002	<0.0002	<0.0002			
3/16/2021	<0.0002						
3/22/2021					<0.0002	<0.0002	0.000723
3/23/2021		0.000204	0.000124 (J)	<0.0002			
10/5/2021	<0.0002			<0.0002			
10/6/2021						<0.0002	0.00045
10/11/2021		0.00045					
10/12/2021			0.00015 (J)		<0.0002		
5/9/2022					<0.0002		0.00046
5/10/2022	<0.0002	0.00047		<0.0002			
5/17/2022			0.00012 (J)			<0.0002	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			0.0254				
2/6/2018			0.0239				
4/23/2018			0.0165				
6/27/2018			0.0302				
8/7/2018			0.0209				
10/22/2018			0.0198				
12/4/2018			0.0118				
2/5/2019			0.0196				
8/20/2019			0.027				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		0.0202				<0.0002
8/25/2020	<0.0002		0.0269				0.00323 (J)
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							0.00386
3/23/2021		<0.0002		0.000481			
3/24/2021			0.0164				
10/6/2021					0.00107		0.00363
10/11/2021		0.00012 (J)	0.0204	0.00031		0.00538	
10/12/2021	<0.0002						
5/10/2022	<0.0002						
5/16/2022		<0.0002	0.0201				0.00357
5/17/2022				0.0004	0.00194	0.0028	

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		<0.0002					
3/23/2021							<0.0002
3/24/2021			0.00118	0.00188			
3/30/2021	0.000673						
10/5/2021		<0.0002	0.00111		0.00015 (J)	<0.0002	0.0001 (J)
10/11/2021				0.00173			
10/12/2021	0.00156						
5/9/2022					0.00011 (J)		
5/10/2022		<0.0002				<0.0002	<0.0002
5/11/2022				0.00135			
5/16/2022	0.00095		0.00122				

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					<0.0002	<0.0002
3/17/2021				<0.0002		
3/23/2021	0.000357	0.00027				
3/24/2021			9.88E-05 (J)			
10/5/2021			7E-05 (J)	0.00028		
10/12/2021	0.00032	0.00018 (J)			<0.0002	<0.0002
5/9/2022			<0.0002	<0.0002		
5/10/2022					<0.0002	<0.0002
5/11/2022	0.0004	0.00024				

Time Series

Constituent: pH (pH) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	6.5	6.83	6.81	5.6			
2/6/2018	6.48						
2/7/2018		6.82	6.74				
2/8/2018				5.44			
4/23/2018	6.36						
4/24/2018		6.74	6.62	5.41			
6/26/2018	6.32						
6/27/2018		6.67	6.69	5.45	3.95		
7/18/2018					4.02		
8/6/2018					4.07		
8/7/2018	6.32	6.72					
8/8/2018			6.67	5.46			
9/5/2018					4.07		
9/24/2018					4.07		
10/22/2018	6.2	6.73					
10/23/2018			6.73	5.47			
10/24/2018					4.1	5.27	7.92
11/14/2018						4.99	8.23
11/28/2018						4.74	8.95
12/4/2018	6.31	6.77	6.67				
12/5/2018				5.45	4.1	4.76	8.77
12/18/2018						4.57	8.99
1/3/2019						4.56	9.35
1/24/2019						4.45	9.42
2/5/2019	6.1				4.02	4.3	9.23
2/6/2019		6.67	6.58	5.31			
2/26/2019	6.11	6.77					
2/27/2019			6.56	5.4			
2/28/2019					3.94 (E)	4.35	9.48
8/19/2019						4.57	7.93
8/20/2019					4		
8/21/2019	6.01						
8/22/2019		6.37	6.26	5.35			
4/14/2020			6.63	5.39			
4/15/2020	5.65	6.85				4.49	
4/16/2020					3.93		8.1
8/24/2020							8.17
8/25/2020	6				4.03	4.2	
8/26/2020		6.73	6.38	5.63			
3/16/2021	5.87						
3/22/2021					3.25	3.45	7.85
3/23/2021		6.87	6.58	5.5			
10/5/2021	5.79			5.19			
10/6/2021						4.16	7.92
10/11/2021		6.72					
10/12/2021			6.66		4.04		
5/9/2022					3.6		7.29
5/10/2022	5.77	6.39		4.78			
5/17/2022			6.44			4.34	

Time Series

Constituent: pH (pH) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			6.61				
2/6/2018			6.66				
4/23/2018			6.54				
6/27/2018			6.63				
8/7/2018			6.57				
10/22/2018			6.55				
12/4/2018			6.52				
2/5/2019			6.47				
2/26/2019			6.54				
8/20/2019			6.3				
4/14/2020		5.79		6.02			
4/15/2020	5.1		6.45				8.6
7/1/2020							8.36
8/25/2020	5.13		6.65				8.43
8/26/2020		6.33		6.36			
3/16/2021	5.08						
3/22/2021							8.34
3/23/2021		5.88		6.38			
3/24/2021			6.49				
10/6/2021					8.53		8.36
10/11/2021		6.08	6.59	6.36		8.13	
10/12/2021	5.12						
5/10/2022	4.87						
5/16/2022		5.24	6.16				8.1
5/17/2022				5.74	8.31	8.29	

Time Series

Constituent: pH (pH) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		6.54					
12/7/2017			6.73		6.32	6.38	6.62
2/6/2018		6.39	6.76		6.27		
2/8/2018						6.29	6.39
4/24/2018		6.02	6.66				
4/25/2018					6.14	6.15	6.17
6/26/2018			6.61			6.09	6.38
6/27/2018		6.07			6.15		
8/6/2018			6.68				
8/7/2018		6.28			6.18	6.16	
8/8/2018							6.56
10/22/2018		6.3	6.63				
10/23/2018					6.15	6.1	6.54
12/3/2018		6.38	6.67			6.09	
12/4/2018							6.33
12/5/2018					6.15		
2/5/2019		5.83	6.63		6.08	6.04	
2/6/2019							6.13
2/25/2019		5.93					
2/26/2019			6.64			6.17	
2/27/2019					6.11		6.12
8/20/2019		5.73	6.33		6.11	5.4	
8/21/2019							5.97
4/13/2020		5.83			6.18	5.82	
4/15/2020			6.77	7.93			6.16
8/24/2020					6.11		
8/26/2020		5.87	6.68	7.83		5.96	6.11
3/16/2021					6.22		
3/17/2021						5.92	
3/22/2021		5.51					
3/23/2021							6.04
3/24/2021			6.86	8.01			
3/30/2021	8.52						
10/5/2021		5.76	6.58		6.24	5.74	6.06
10/11/2021				7.82			
10/12/2021	8.62						
5/9/2022					5.43		
5/10/2022		5.95				5.51	5.08
5/11/2022				7.91			
5/16/2022	8.48		6.61				

Time Series

Constituent: pH (pH) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	6.81	6.93				
2/8/2018	6.73	6.96				
2/12/2018		6.88				
4/25/2018	6.61	6.89				
6/26/2018	6.59	6.85				
6/27/2018			6.79		5.81	5.44
7/18/2018			6.8		5.74	5.58
8/7/2018			6.73			
8/8/2018	6.6	6.94			5.7	5.55
9/5/2018			6.75		5.61	5.56
9/24/2018			6.83		5.59	5.57
10/22/2018			6.76			
10/23/2018	6.64	6.93			5.6	5.55
12/3/2018			6.6		5.73	5.6
12/4/2018	6.68					
12/5/2018		6.94				
2/5/2019			6.66			
2/6/2019	6.62	6.73				
2/7/2019					5.44	5.51
2/25/2019			6.6		5.46	5.54
2/27/2019	6.56	6.85				
8/20/2019			6.3			
8/21/2019	6.16	6.61			5.13	5.44
4/13/2020			6.66	5.84		
4/14/2020	6.49	7.02				
4/15/2020					5.31	5.52
8/24/2020			6.64	6	4.65	5.38
8/26/2020	6.29	6.75				
3/16/2021					5.47	5.56
3/17/2021				5.34		
3/23/2021	6.47	6.85				
3/24/2021			5.85			
10/5/2021			6.46	5.72		
10/12/2021	6.61	6.9			5.33	5.41
5/9/2022			6.03	4.35		
5/10/2022					5.38	5.57
5/11/2022	6.25	6.7				

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.00102	<0.00102	<0.00102	<0.00102			
2/6/2018	<0.00102						
2/7/2018		<0.00102	<0.00102				
2/8/2018				<0.00102			
4/23/2018	<0.00102						
4/24/2018		<0.00102	<0.00102	<0.00102			
6/26/2018	<0.00102						
6/27/2018		<0.00102	<0.00102	<0.00102	<0.00102		
7/18/2018					<0.00102		
8/6/2018					<0.00102		
8/7/2018	<0.00102	<0.00102					
8/8/2018			<0.00102	<0.00102			
9/5/2018					<0.00102		
9/24/2018					<0.00102		
10/22/2018	<0.00102	<0.00102					
10/23/2018			<0.00102	<0.00102			
10/24/2018					<0.00102	<0.00102	<0.00102
11/14/2018						<0.00102	<0.00102
11/28/2018						<0.00102	<0.00102
12/4/2018	<0.00102	<0.00102	<0.00102				
12/5/2018				<0.00102	0.00208 (J)	0.00349 (J)	<0.00102
12/18/2018						0.00395 (J)	<0.00102
1/3/2019						0.00488 (J)	<0.00102
1/24/2019						0.00707 (J)	<0.00102
2/5/2019	<0.00102				0.00387 (J)	0.00938 (J)	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102			
6/24/2019						0.00563 (J)	
8/19/2019						0.00316 (J)	<0.00102
8/20/2019					0.00328 (J)		
8/21/2019	<0.00102						
8/22/2019		<0.00102	<0.00102	<0.00102			
4/14/2020			<0.00102	<0.00102			
4/15/2020	<0.00102	<0.00102				0.00434 (J)	
4/16/2020					0.00608 (J)		<0.00102
8/24/2020							<0.00102
8/25/2020	<0.00102				0.00247 (J)	0.00262 (J)	
8/26/2020		<0.00102	<0.00102	<0.00102			
3/16/2021	<0.00102						
3/22/2021					0.00488	0.0134	<0.00102
3/23/2021		<0.00102	<0.00102	<0.00102			
10/5/2021	<0.00102			<0.00102			
10/6/2021						0.00262	<0.00102
10/11/2021		<0.00102					
10/12/2021			<0.00102		0.00287		
5/9/2022					0.00394		<0.00102
5/10/2022	<0.00102	<0.00102		<0.00102			
5/17/2022			<0.00102			0.00609	

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.00102				
2/6/2018			<0.00102				
4/23/2018			<0.00102				
6/27/2018			<0.00102				
8/7/2018			<0.00102				
10/22/2018			<0.00102				
12/4/2018			<0.00102				
2/5/2019			<0.00102				
8/20/2019			<0.00102				
4/14/2020		<0.00102		<0.00102			
4/15/2020	<0.00102		<0.00102				<0.00102
8/25/2020	<0.00102		<0.00102				<0.00102
8/26/2020		<0.00102		<0.00102			
3/16/2021	0.000935 (J)						
3/22/2021							<0.00102
3/23/2021		<0.00102		<0.00102			
3/24/2021			<0.00102				
10/6/2021					<0.00102		<0.00102
10/11/2021		<0.00102	<0.00102	<0.00102		<0.00102	
10/12/2021	0.00068 (J)						
5/10/2022	0.00125						
5/16/2022		<0.00102	<0.00102				<0.00102
5/17/2022				<0.00102	<0.00102	<0.00102	

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.00102					
12/7/2017			<0.00102		<0.00102	<0.00102	<0.00102
2/6/2018		<0.00102	<0.00102		<0.00102		
2/8/2018						<0.00102	<0.00102
4/24/2018		<0.00102	<0.00102				
4/25/2018					<0.00102	<0.00102	<0.00102
6/26/2018			<0.00102			<0.00102	<0.00102
6/27/2018		<0.00102			<0.00102		
8/6/2018			<0.00102				
8/7/2018		<0.00102			<0.00102	<0.00102	
8/8/2018							<0.00102
10/22/2018		<0.00102	<0.00102				
10/23/2018					<0.00102	<0.00102	<0.00102
12/3/2018		<0.00102	<0.00102			<0.00102	
12/4/2018							<0.00102
12/5/2018					<0.00102		
2/5/2019		<0.00102	<0.00102		<0.00102	<0.00102	
2/6/2019							<0.00102
6/18/2019		<0.00102					
8/20/2019		<0.00102	<0.00102		<0.00102	<0.00102	
8/21/2019							<0.00102
4/13/2020		<0.00102			<0.00102	<0.00102	
4/15/2020			<0.00102	<0.00102			<0.00102
8/24/2020					<0.00102		
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102
3/16/2021					<0.00102		
3/17/2021						<0.00102	
3/22/2021		<0.00102					
3/23/2021							<0.00102
3/24/2021			<0.00102	<0.00102			
3/30/2021	<0.00102						
10/5/2021		<0.00102	<0.00102		<0.00102	<0.00102	<0.00102
10/11/2021				<0.00102			
10/12/2021	<0.00102						
5/9/2022					<0.00102		
5/10/2022		<0.00102				<0.00102	<0.00102
5/11/2022				<0.00102			
5/16/2022	<0.00102		<0.00102				

Time Series

Constituent: Selenium (mg/L) Analysis Run 7/18/2022 1:37 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.00102	<0.00102				
2/8/2018	<0.00102	<0.00102				
4/25/2018	<0.00102	<0.00102				
6/26/2018	<0.00102	<0.00102				
6/27/2018			<0.00102		<0.00102	<0.00102
7/18/2018			<0.00102		<0.00102	<0.00102
8/7/2018			<0.00102			
8/8/2018	<0.00102	<0.00102			<0.00102	<0.00102
9/5/2018			<0.00102		<0.00102	<0.00102
9/24/2018			<0.00102		<0.00102	<0.00102
10/22/2018			<0.00102			
10/23/2018	<0.00102	<0.00102			<0.00102	<0.00102
12/3/2018			<0.00102		<0.00102	<0.00102
12/4/2018	<0.00102					
12/5/2018		<0.00102				
2/5/2019			<0.00102			
2/6/2019	<0.00102	<0.00102				
2/7/2019					<0.00102	<0.00102
8/20/2019			<0.00102			
8/21/2019	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020			<0.00102	<0.00102		
4/14/2020	<0.00102	<0.00102				
4/15/2020					<0.00102	<0.00102
8/24/2020			<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102				
3/16/2021					<0.00102	<0.00102
3/17/2021				<0.00102		
3/23/2021	<0.00102	<0.00102				
3/24/2021			<0.00102			
10/5/2021			<0.00102	<0.00102		
10/12/2021	<0.00102	<0.00102			<0.00102	<0.00102
5/9/2022			<0.00102	<0.00102		
5/10/2022					<0.00102	<0.00102
5/11/2022	<0.00102	<0.00102				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	650	11	83	200			
2/6/2018	560						
2/7/2018		19	84				
2/8/2018				200			
4/23/2018	640						
4/24/2018		27	98	210			
6/26/2018	670						
6/27/2018		<1	95	240	120		
7/18/2018					120		
8/6/2018					110		
8/7/2018	660	<1					
8/8/2018			110	260			
9/5/2018					86		
9/24/2018					80		
10/22/2018	580	<1					
10/23/2018			78	280			
10/24/2018					68	44	16
11/14/2018						44	13
11/28/2018						46	11
12/4/2018	580	11	97				
12/5/2018				280	54	51	12
12/18/2018						76	11
1/3/2019						94	10
1/24/2019						135	10.2
2/5/2019	702				126	183	10.4
2/6/2019		16.8	113	239			
2/26/2019	748	38.4					
2/27/2019			135	257			
2/28/2019					207	192	9.86
6/24/2019						129 (D)	
8/19/2019						66.6	8.74
8/20/2019					106		
8/21/2019	708						
8/22/2019		6.74	305	339			
4/14/2020			146	155			
4/15/2020	647	50.7				92.8	
4/16/2020					191		11.5
8/24/2020							10
8/25/2020	642				98.4	74.1	
8/26/2020		10.5	280	282			
3/16/2021	593						
3/22/2021					83.8	128	10.6
3/23/2021		60.1	135	160			
10/5/2021	567			195			
10/6/2021						93.5	10.2
10/11/2021		7.75					
10/12/2021			142		95.7		
5/9/2022					125		10
5/10/2022	508	11.6		193			
5/17/2022			145			139	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			210				
2/6/2018			190				
4/23/2018			140				
6/27/2018			130				
8/7/2018			150				
10/22/2018			160				
12/4/2018			170				
2/5/2019			145				
2/26/2019			148				
8/20/2019			110				
4/14/2020		75.3		135			
4/15/2020	67.1		116				4.18
8/25/2020	52.6		114				4.83
8/26/2020		72.9		112			
3/16/2021	18.5						
3/22/2021							2.04
3/23/2021		71.8		168			
3/24/2021			101				
10/6/2021					8.35		2.44
10/11/2021		61.7	112	174		13.8	
10/12/2021	36.7						
5/10/2022	42.1						
5/16/2022		60.2	93.1				1.15 (J)
5/17/2022				187	19.1	6.55	

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		250					
12/7/2017			<1		19	10	14
2/6/2018		230	<1		20		
2/8/2018						11	10
4/24/2018		260	<1				
4/25/2018					22	13	11
6/26/2018			<1			11	11
6/27/2018		230			18		
8/6/2018			<1				
8/7/2018		200			20	12	
8/8/2018							13
10/22/2018		190	<1				
10/23/2018					18	11	13
12/3/2018		200	<1			12	
12/4/2018							9.8
12/5/2018					20		
2/5/2019		263	5.38		24.3	13.9	
2/6/2019							10.8
2/25/2019		246					
2/26/2019			5.1			14.1	
2/27/2019					24.7		8.98
6/18/2019		245					
8/20/2019		222	7.34		21.3	12.3	
8/21/2019							11.8
4/13/2020		256			21.9	13.9	
4/15/2020			17.2	1.25			7.95
8/24/2020					21.2		
8/26/2020		246	15.5	1.21		13.1	9.19
3/16/2021					18.8		
3/17/2021						13.7	
3/22/2021		254					
3/23/2021							8.08
3/24/2021			19.9	1.39			
3/30/2021	10.3						
10/5/2021		228	37.8		14.4	14.2	9.19
10/11/2021				1.7			
10/12/2021	15.2						
5/9/2022					15.5		
5/10/2022		215				14.8	7.13
5/11/2022				1.73 (J)			
5/16/2022	10		51.8				

Time Series

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	6.5	9				
2/8/2018	8.9					
2/12/2018		8.3				
4/25/2018	7.9	12				
6/26/2018	7.5	8.5				
6/27/2018			2.2 (J)		<1	<1
7/18/2018			2.5 (J)		<1	<1
8/7/2018			<1			
8/8/2018	7.3	6.7			<1	<1
9/5/2018			1.4 (J)		<1	<1
9/24/2018			<1		<1	<1
10/22/2018			1.7 (J)			
10/23/2018	7.8	9.4			<1	<1
12/3/2018			2.1 (J)		<1	<1
12/4/2018	8.2					
12/5/2018		7.8				
2/5/2019			3.99			
2/6/2019	9.53	17				
2/7/2019					0.639 (J)	1.69
2/25/2019			4.01		<1	1.53
2/27/2019	8.25	12.4				
8/20/2019			3.73			
8/21/2019	10.8	11.3			1.21	1.62
4/13/2020			3.83	1.48		
4/14/2020	12.5	15.9				
4/15/2020					0.554 (J)	1.68
8/24/2020			4.16	3.88	<1	1.31
8/26/2020	16.1	12.9				
3/16/2021					1.02	1.7
3/17/2021				1.64		
3/23/2021	9.21	15.7				
3/24/2021			2.88			
10/5/2021			2.17	5.29		
10/12/2021	16	18			0.895 (J)	1.34
5/9/2022			2.51	1.15 (J)		
5/10/2022					1.02 (J)	1.28 (J)
5/11/2022	11.8	17.7				

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	<0.0002	<0.0002	<0.0002	<0.0002			
2/6/2018	<0.0002						
2/7/2018		<0.0002	<0.0002				
2/8/2018				<0.0002			
4/23/2018	<0.0002						
4/24/2018		<0.0002	<0.0002	<0.0002			
6/26/2018	<0.0002						
6/27/2018		<0.0002	<0.0002	<0.0002	<0.0002		
7/18/2018					<0.0002		
8/6/2018					<0.0002		
8/7/2018	<0.0002	<0.0002					
8/8/2018			<0.0002	<0.0002			
9/5/2018					<0.0002		
9/24/2018					<0.0002		
10/22/2018	<0.0002	<0.0002					
10/23/2018			<0.0002	<0.0002			
10/24/2018					<0.0002	<0.0002	<0.0002
11/14/2018						<0.0002	<0.0002
11/28/2018						<0.0002	<0.0002
12/4/2018	<0.0002	<0.0002	<0.0002				
12/5/2018				<0.0002	<0.0002	<0.0002	<0.0002
12/18/2018						<0.0002	<0.0002
1/3/2019						<0.0002	<0.0002
1/24/2019						<0.0002	<0.0002
2/5/2019	<0.0002				<0.0002	<0.0002	<0.0002
2/6/2019		<0.0002	<0.0002	<0.0002			
6/24/2019						<0.0002	
8/19/2019						<0.0002	<0.0002
8/20/2019					<0.0002		
8/21/2019	<0.0002						
8/22/2019		<0.0002	<0.0002	<0.0002			
4/14/2020			<0.0002	<0.0002			
4/15/2020	<0.0002	<0.0002				<0.0002	
4/16/2020					<0.0002		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002				<0.0002	<0.0002	
8/26/2020		<0.0002	<0.0002	<0.0002			
3/16/2021	0.000112 (J)						
3/22/2021					<0.0002	<0.0002	<0.0002
3/23/2021		<0.0002	<0.0002	<0.0002			
10/5/2021	<0.0002			<0.0002			
10/6/2021						<0.0002	<0.0002
10/11/2021		<0.0002					
10/12/2021			<0.0002		<0.0002		
5/9/2022					<0.0002		<0.0002
5/10/2022	0.00013 (J)	<0.0002		<0.0002			
5/17/2022			<0.0002			<0.0002	

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			<0.0002				
2/6/2018			<0.0002				
4/23/2018			<0.0002				
6/27/2018			<0.0002				
8/7/2018			<0.0002				
10/22/2018			0.000213 (J)				
12/4/2018			<0.0002				
2/5/2019			0.000256 (J)				
8/20/2019			0.000322 (J)				
4/14/2020		<0.0002		<0.0002			
4/15/2020	<0.0002		0.000318 (J)				<0.0002
8/25/2020	<0.0002		0.000347 (J)				<0.0002
8/26/2020		<0.0002		<0.0002			
3/16/2021	<0.0002						
3/22/2021							<0.0002
3/23/2021		<0.0002		0.000145 (J)			
3/24/2021			0.00037				
10/6/2021					<0.0002		<0.0002
10/11/2021		<0.0002	0.00029	0.00013 (J)		<0.0002	
10/12/2021	<0.0002						
5/10/2022	<0.0002						
5/16/2022		<0.0002	0.00041				<0.0002
5/17/2022				0.00013 (J)	<0.0002	<0.0002	

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		<0.0002					
12/7/2017			<0.0002		<0.0002	<0.0002	<0.0002
2/6/2018		<0.0002	<0.0002		<0.0002		
2/8/2018						<0.0002	<0.0002
4/24/2018		<0.0002	<0.0002				
4/25/2018					<0.0002	<0.0002	<0.0002
6/26/2018			<0.0002			<0.0002	<0.0002
6/27/2018		<0.0002			<0.0002		
8/6/2018			<0.0002				
8/7/2018		<0.0002			<0.0002	<0.0002	
8/8/2018							<0.0002
10/22/2018		<0.0002	<0.0002				
10/23/2018					<0.0002	<0.0002	<0.0002
12/3/2018		<0.0002	<0.0002			<0.0002	
12/4/2018							<0.0002
12/5/2018					<0.0002		
2/5/2019		<0.0002	<0.0002		<0.0002	<0.0002	
2/6/2019							<0.0002
6/18/2019		<0.0002					
8/20/2019		<0.0002	<0.0002		<0.0002	<0.0002	
8/21/2019							<0.0002
4/13/2020		<0.0002			<0.0002	<0.0002	
4/15/2020			<0.0002	<0.0002			<0.0002
8/24/2020					<0.0002		
8/26/2020		<0.0002	<0.0002	<0.0002		<0.0002	<0.0002
3/16/2021					<0.0002		
3/17/2021						<0.0002	
3/22/2021		0.000121 (J)					
3/23/2021							<0.0002
3/24/2021			<0.0002	<0.0002			
3/30/2021	<0.0002						
10/5/2021		0.00014 (J)	<0.0002		<0.0002	<0.0002	<0.0002
10/11/2021				<0.0002			
10/12/2021	<0.0002						
5/9/2022					<0.0002		
5/10/2022		0.00011 (J)				<0.0002	<0.0002
5/11/2022				<0.0002			
5/16/2022	<0.0002		<0.0002				

Time Series

Constituent: Thallium (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	<0.0002	<0.0002				
2/8/2018	<0.0002	<0.0002				
4/25/2018	<0.0002	<0.0002				
6/26/2018	<0.0002	<0.0002				
6/27/2018			<0.0002		<0.0002	<0.0002
7/18/2018			<0.0002		<0.0002	<0.0002
8/7/2018			<0.0002			
8/8/2018	<0.0002	<0.0002			<0.0002	<0.0002
9/5/2018			<0.0002		<0.0002	<0.0002
9/24/2018			<0.0002		<0.0002	<0.0002
10/22/2018			<0.0002			
10/23/2018	<0.0002	<0.0002			<0.0002	<0.0002
12/3/2018			<0.0002		<0.0002	<0.0002
12/4/2018	<0.0002					
12/5/2018		<0.0002				
2/5/2019			<0.0002			
2/6/2019	<0.0002	<0.0002				
2/7/2019					<0.0002	<0.0002
8/20/2019			<0.0002			
8/21/2019	<0.0002	<0.0002			<0.0002	<0.0002
4/13/2020			<0.0002	<0.0002		
4/14/2020	<0.0002	<0.0002				
4/15/2020					<0.0002	<0.0002
8/24/2020			<0.0002	<0.0002	<0.0002	<0.0002
8/26/2020	<0.0002	<0.0002				
3/16/2021					<0.0002	<0.0002
3/17/2021				<0.0002		
3/23/2021	<0.0002	<0.0002				
3/24/2021			<0.0002			
10/5/2021			<0.0002	<0.0002		
10/12/2021	<0.0002	<0.0002			<0.0002	<0.0002
5/9/2022			<0.0002	<0.0002		
5/10/2022					<0.0002	<0.0002
5/11/2022	<0.0002	<0.0002				

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-14 ...	GSD-AP-MW-16 ...	GSD-AP-MW-17 ...
12/6/2017	1300	215	312	371			
2/6/2018	1310						
2/7/2018		237	323				
2/8/2018				367			
4/23/2018	1210						
4/24/2018		242	324	365			
6/26/2018	1250						
6/27/2018		194	333	421	219		
7/18/2018					195		
8/6/2018					175		
8/7/2018	1220	195					
8/8/2018			346	479			
9/5/2018					153		
9/24/2018					127		
10/22/2018	1150	184					
10/23/2018			311	507			
10/24/2018					125	107	184
11/14/2018						96.7	170
11/28/2018						102	167
12/4/2018	1090	215	343				
12/5/2018				479	101	103	185
12/18/2018						126	164
1/3/2019						191	167
1/24/2019						212	137
2/5/2019	1200				180	269	138
2/6/2019		208	317	399			
2/26/2019	1210	252					
2/27/2019			360	422			
2/28/2019					287	261	140
6/24/2019						203.5 (D)	
8/19/2019						121	240
8/20/2019					265		
8/21/2019	1200						
8/22/2019		194	555	501			
4/14/2020			372	278			
4/15/2020	1060	262				155	
4/16/2020					280		166
8/24/2020							162
8/25/2020	1060				160	131	
8/26/2020		186	517	472			
3/16/2021	1040						
3/22/2021					126	204	157
3/23/2021		273	361	286			
10/5/2021	964			378			
10/6/2021						136	182
10/11/2021		190					
10/12/2021			352		142		
5/9/2022					185		152
5/10/2022	780	199		319			
5/17/2022			367			226	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-18H	GSD-AP-MW-19H	GSD-AP-MW-2	GSD-AP-MW-20H	GSD-AP-MW-21VC	GSD-AP-MW-22VB	GSD-AP-MW-2VA
12/6/2017			574				
2/6/2018			572				
4/23/2018			414				
6/27/2018			440				
8/7/2018			485				
10/22/2018			484				
12/4/2018			504				
2/5/2019			366				
2/26/2019			372				
8/20/2019			369				
4/14/2020		190		323			
4/15/2020	126		300				324
8/25/2020	107		339				321
8/26/2020		202		310			
3/16/2021	52						
3/22/2021							314
3/23/2021		174		385			
3/24/2021			287				
10/6/2021					864		317
10/11/2021		202	337	384		230	
10/12/2021	78.7						
5/10/2022	90						
5/16/2022		138	244				316
5/17/2022				401	921	238	

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2VB	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-4V	GSD-AP-MW-5	GSD-AP-MW-6	GSD-AP-MW-7
12/6/2017		628					
12/7/2017			189		215	136	137
2/6/2018		556	206		204		
2/8/2018						122	124
4/24/2018		510	193				
4/25/2018					192	102	106
6/26/2018			180			106	129
6/27/2018		486			180		
8/6/2018			182				
8/7/2018		487			183	71.3	
8/8/2018							142
10/22/2018		450	204				
10/23/2018					169	105	142
12/3/2018		492	168			102	
12/4/2018							121
12/5/2018					177		
2/5/2019		428	158		198	107	
2/6/2019							108
2/25/2019		441					
2/26/2019			191			99.3	
2/27/2019					185		103
6/18/2019		422					
8/20/2019		416	164		174	98.7	
8/21/2019							133
4/13/2020		433			192	90.7	
4/15/2020			170	218			102
8/24/2020					175		
8/26/2020		455	168	239		91.3	109
3/16/2021					184		
3/17/2021						80	
3/22/2021		427					
3/23/2021							92.7
3/24/2021			180	222			
3/30/2021	528						
10/5/2021		389	200		168	96.7	113
10/11/2021				220			
10/12/2021	536						
5/9/2022					174		
5/10/2022		362				73.3	82.7
5/11/2022				220			
5/16/2022	508		218				

Time Series

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:38 PM View: Constituents View

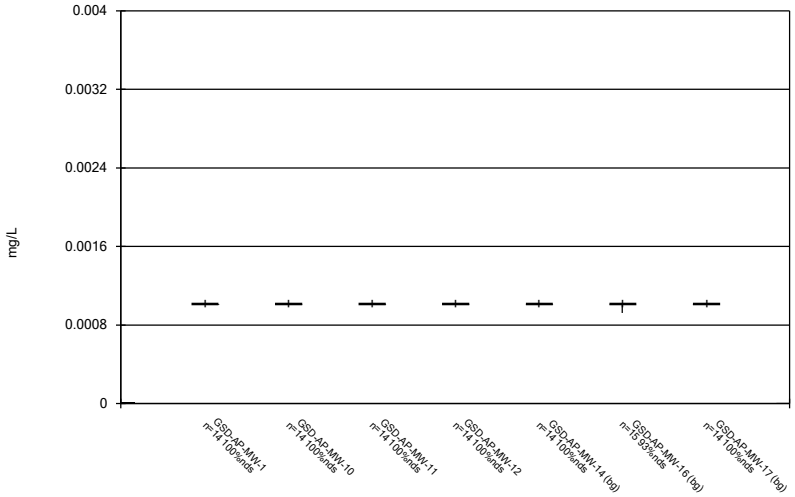
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017	253	183				
2/8/2018	229					
2/12/2018		201				
4/25/2018	223	180				
6/26/2018	232	191				
6/27/2018			144		48.7	44
7/18/2018			156		46	42.7
8/7/2018			140			
8/8/2018	208	192			48	46
9/5/2018			154		47.3	67.3
9/24/2018			165		44.7	49.3
10/22/2018			148			
10/23/2018	209	185			35.3	31.3
12/3/2018			127		48.7	46
12/4/2018	213					
12/5/2018		200				
2/5/2019			113			
2/6/2019	212	151				
2/7/2019					42.7	32.7
2/25/2019			106		40.7	31.3
2/27/2019	211	186				
8/20/2019			141			
8/21/2019	226	200			46	42.7
4/13/2020			104	88		
4/14/2020	222	187				
4/15/2020					41.3	37.3
8/24/2020			114	115	42.7	37.3
8/26/2020	215	192				
3/16/2021					42	41.3
3/17/2021				53.3		
3/23/2021	200	178				
3/24/2021			94			
10/5/2021			108	101		
10/12/2021	245	169			38.7	35.3
5/9/2022			85.3	53.3		
5/10/2022					33.3	33.3
5/11/2022	216	181				

FIGURE B.

Sanitas™ v.9.6.35 . UG

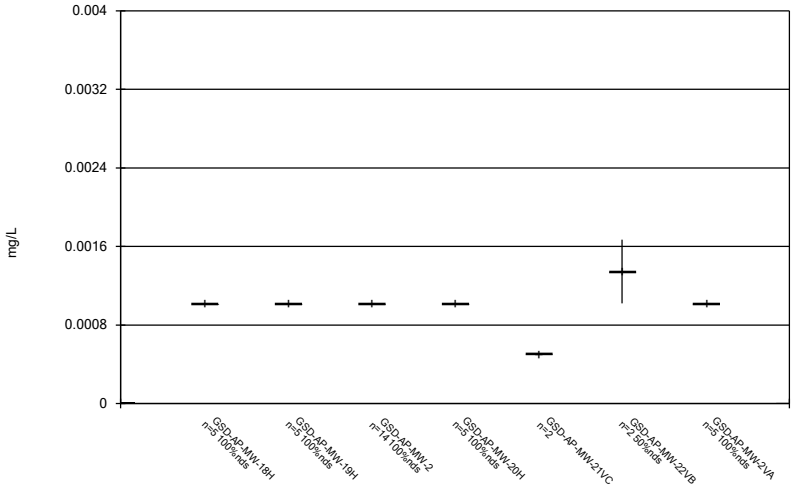
Box & Whiskers Plot



Constituent: Antimony Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

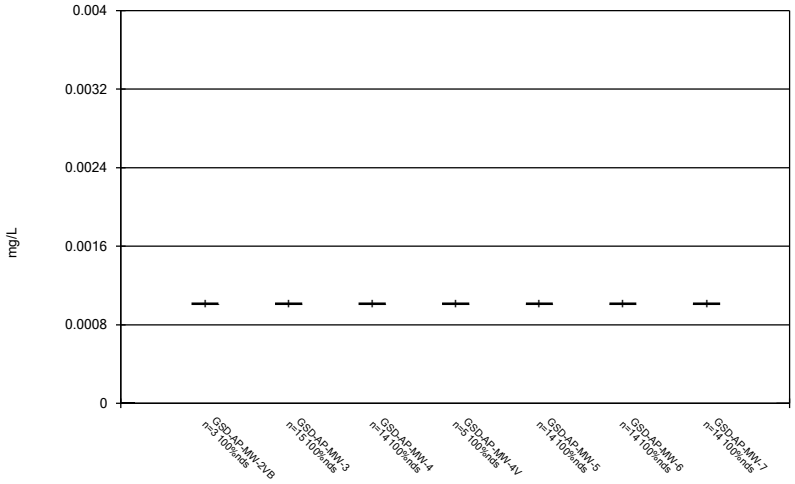
Box & Whiskers Plot



Constituent: Antimony Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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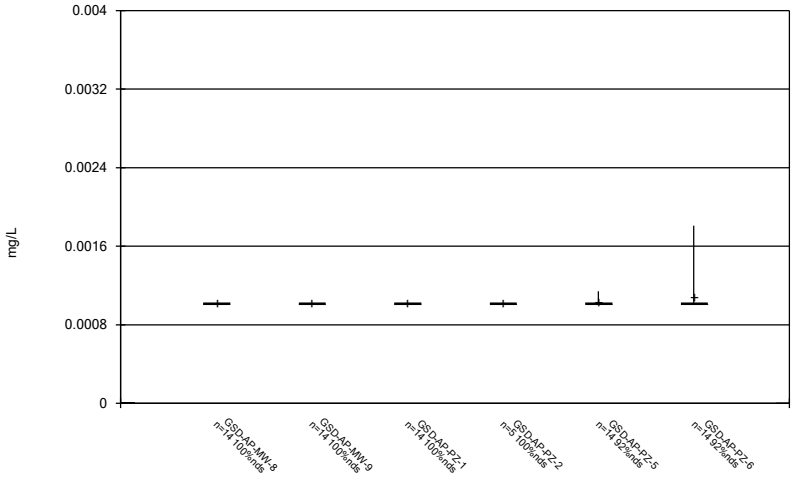
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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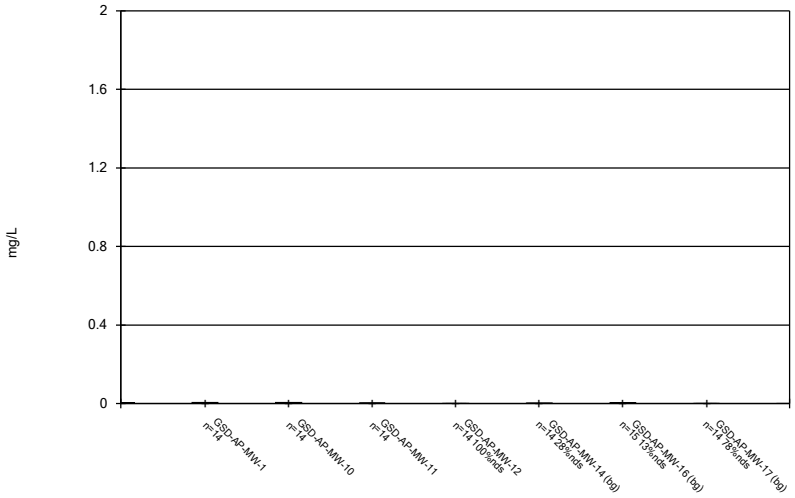
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

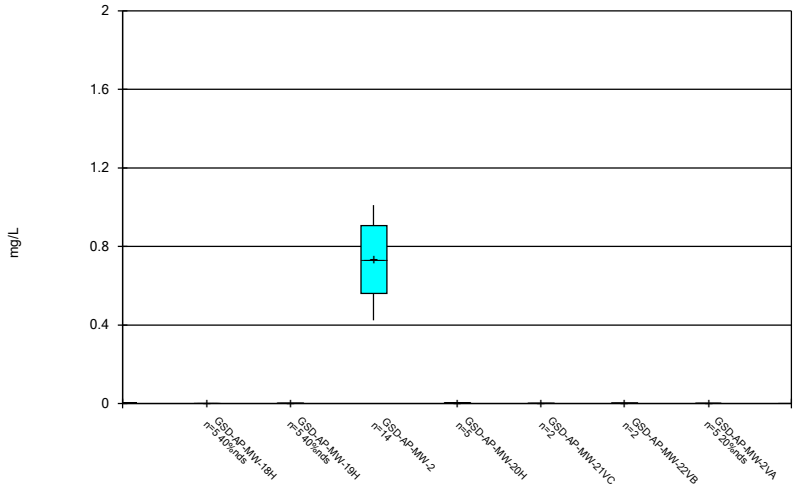
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

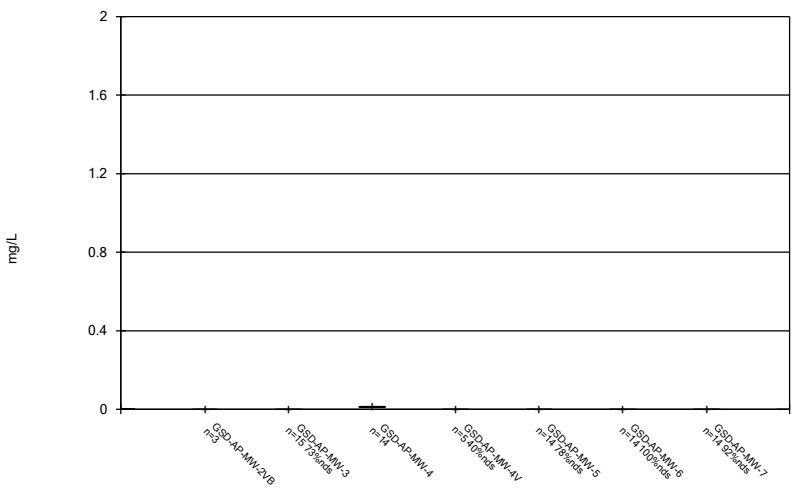
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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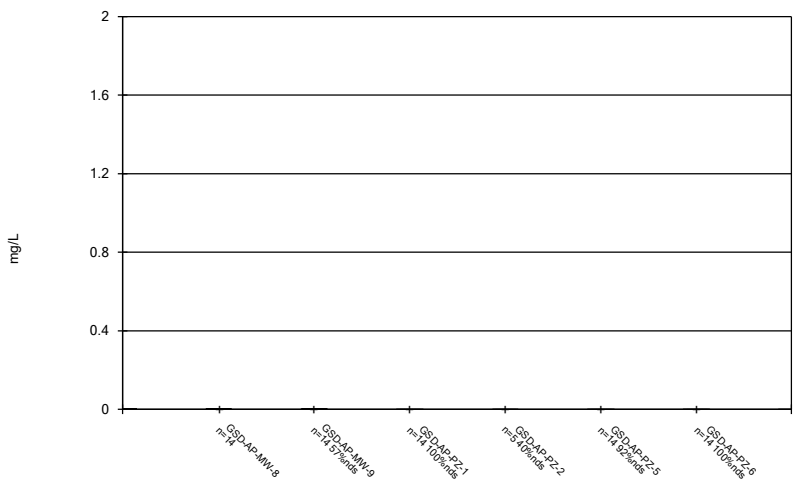
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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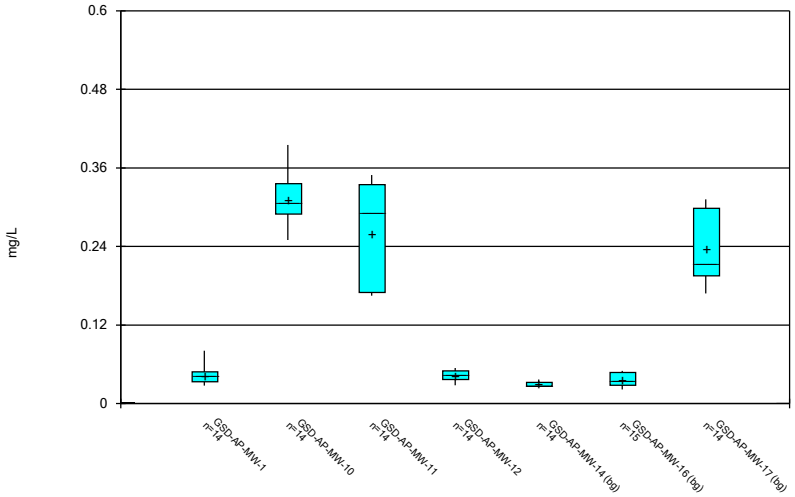
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

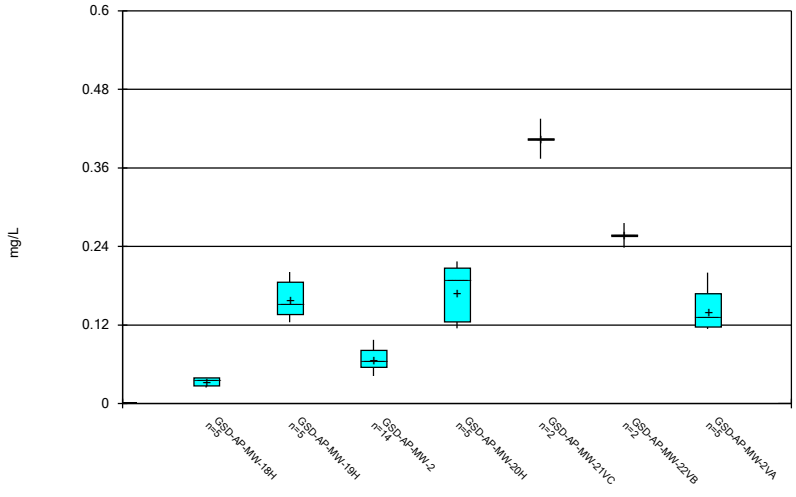
Box & Whiskers Plot



Constituent: Barium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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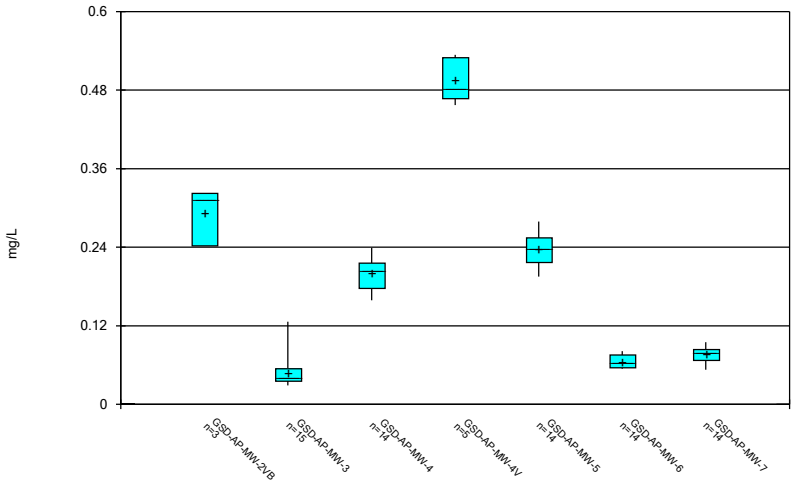
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

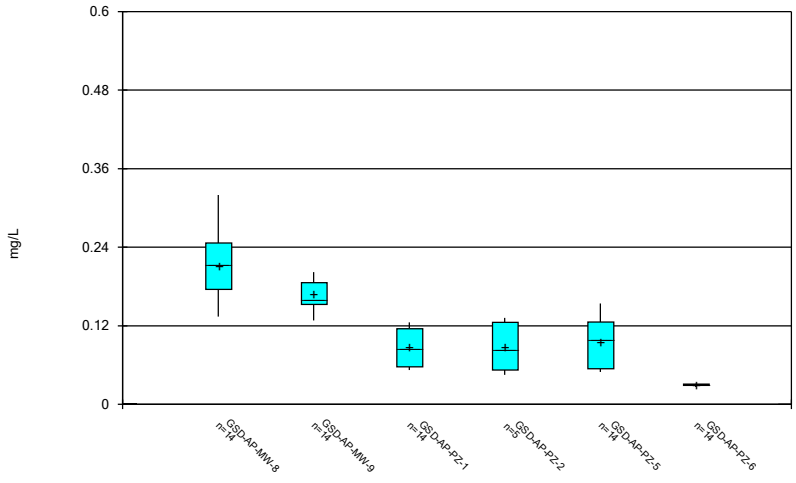
Box & Whiskers Plot



Constituent: Barium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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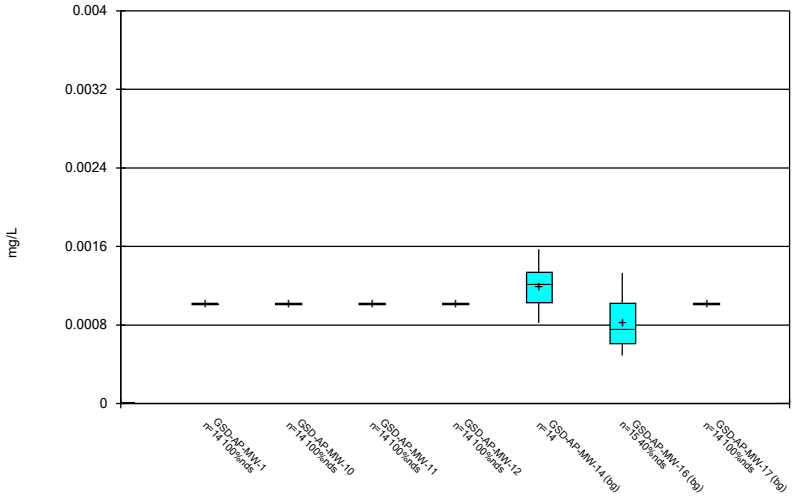
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

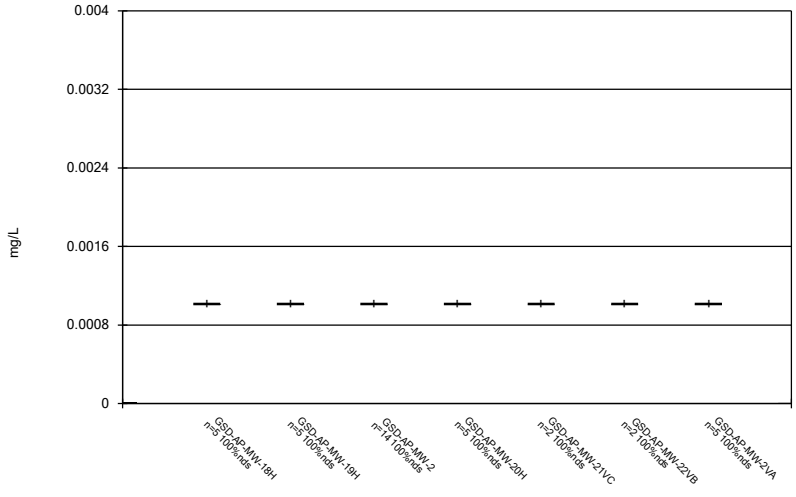
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

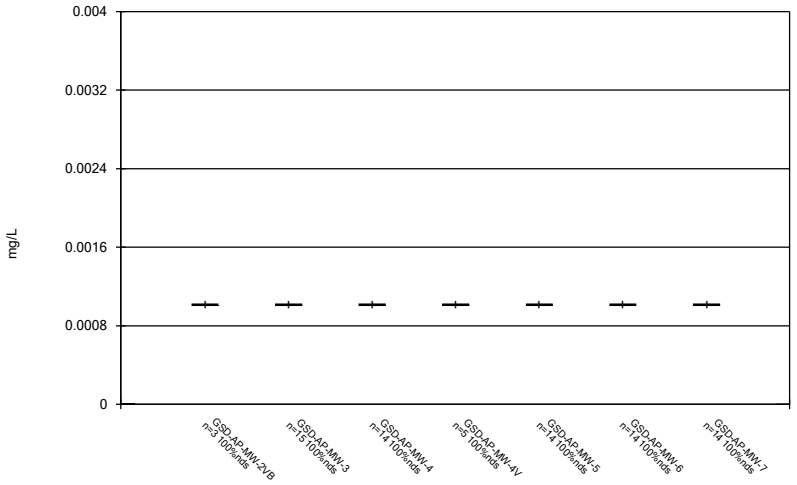
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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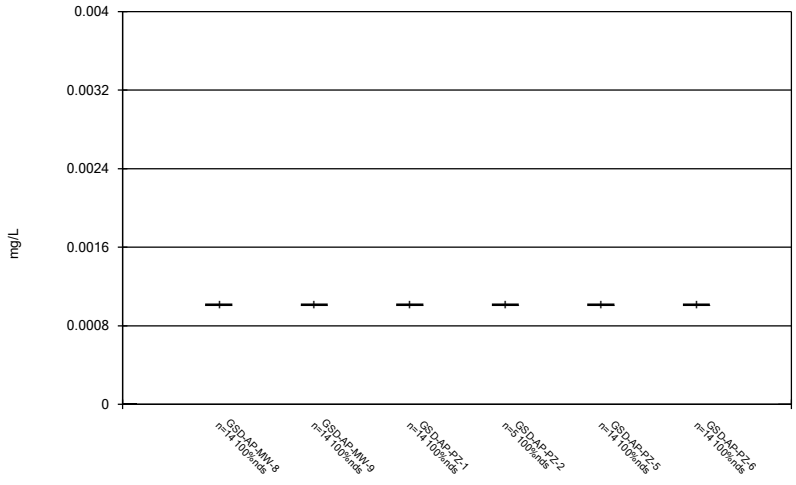
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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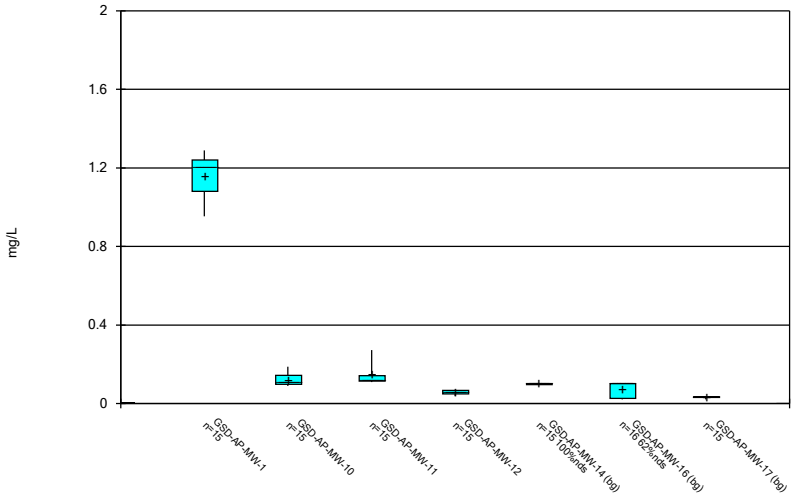
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

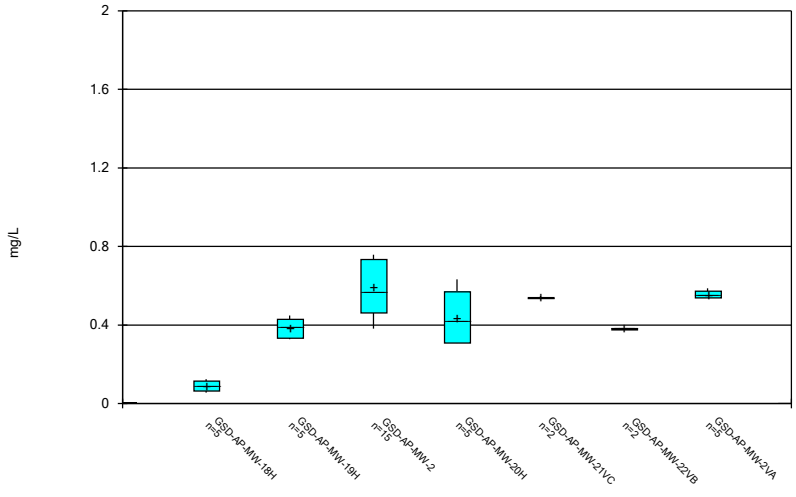
Box & Whiskers Plot



Constituent: Boron Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

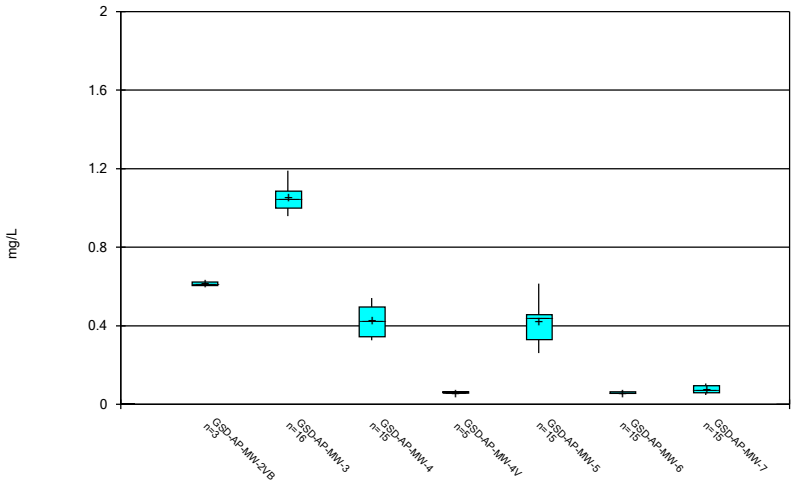
Box & Whiskers Plot



Constituent: Boron Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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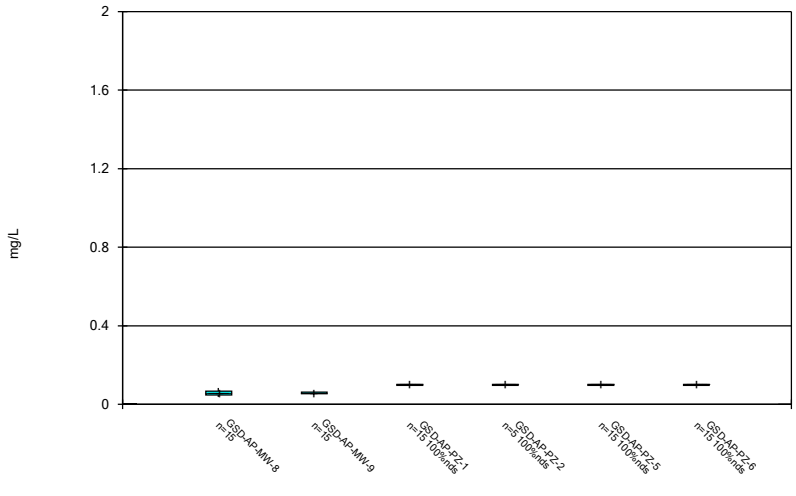
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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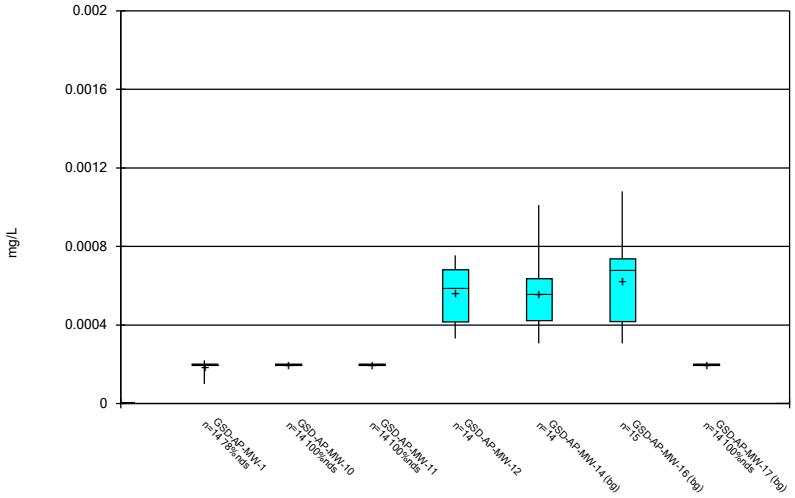
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

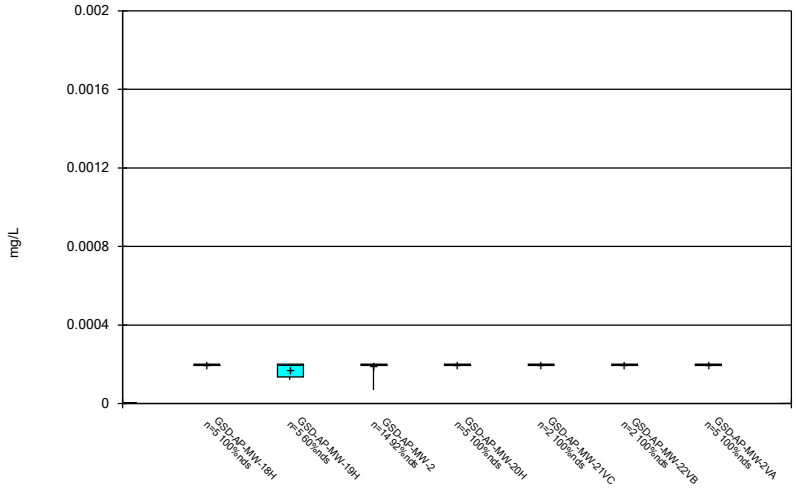
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

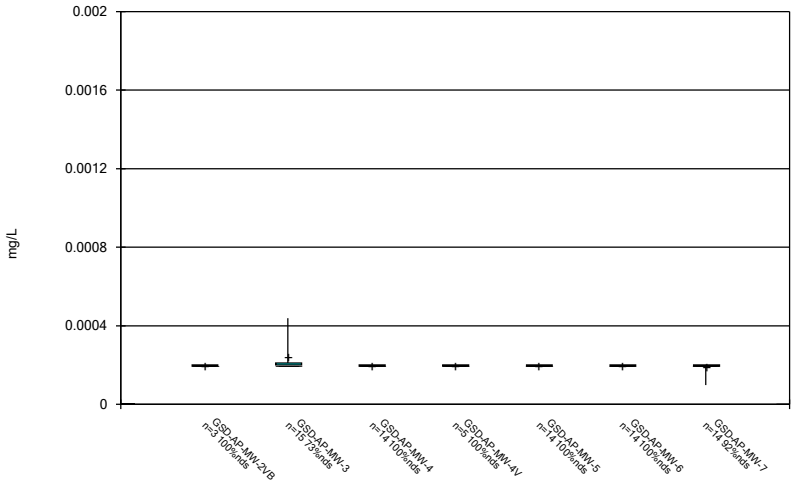
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

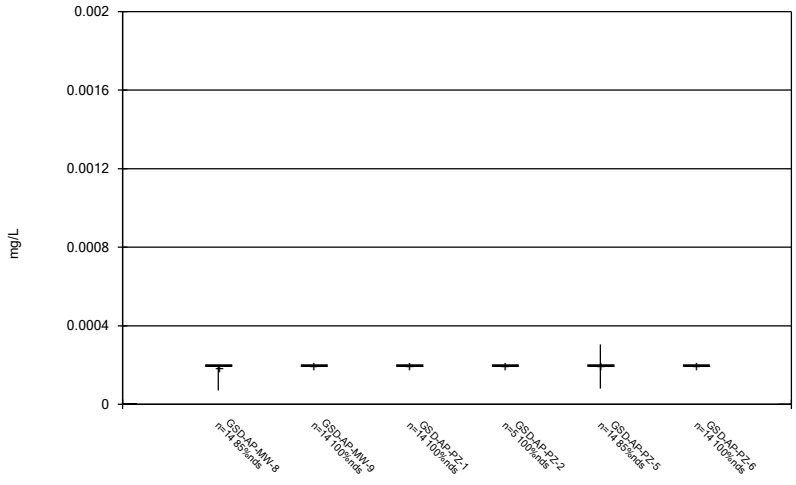
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

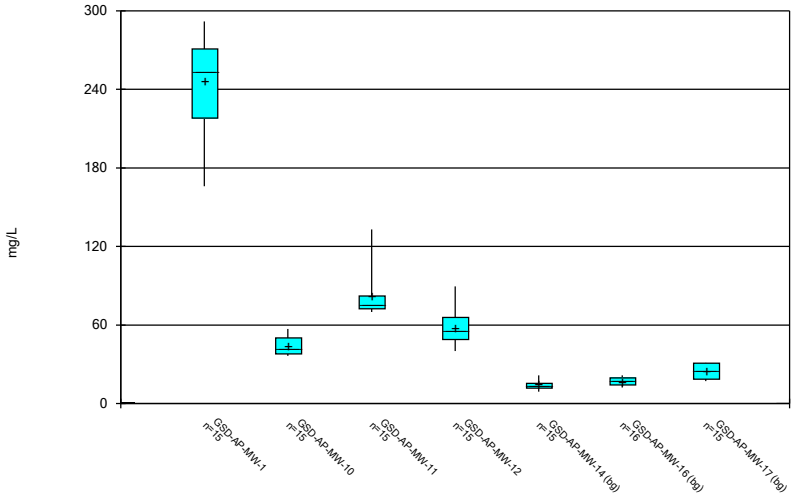
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

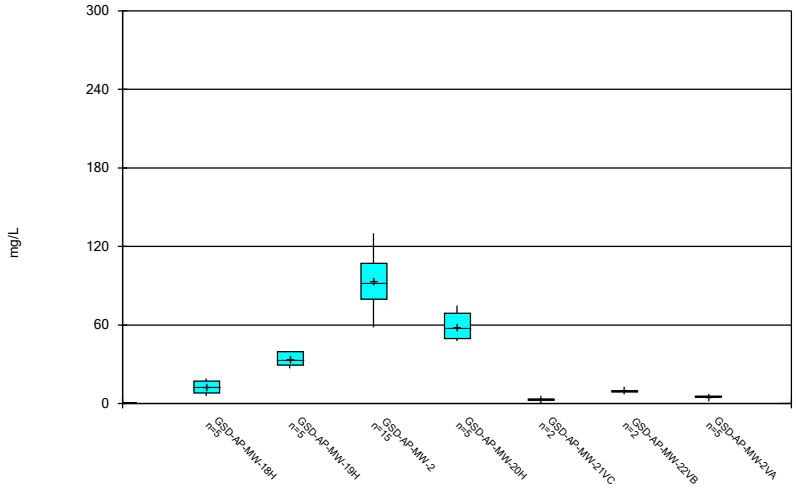
Box & Whiskers Plot



Constituent: Calcium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

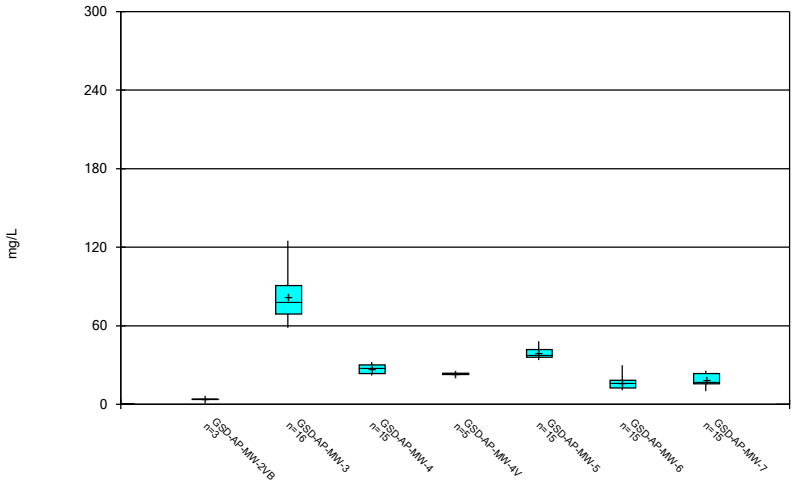
Box & Whiskers Plot



Constituent: Calcium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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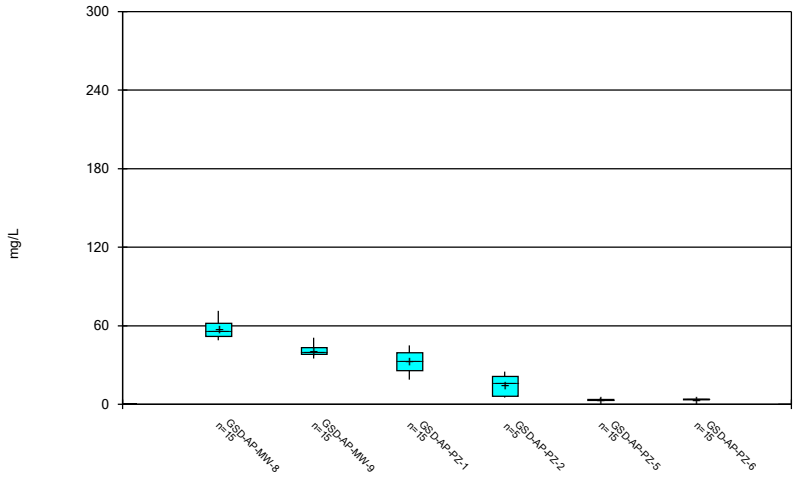
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

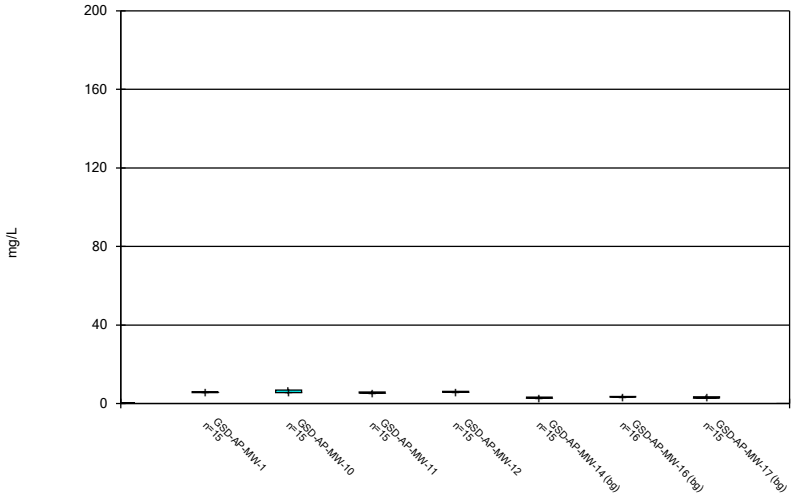
Box & Whiskers Plot



Constituent: Calcium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

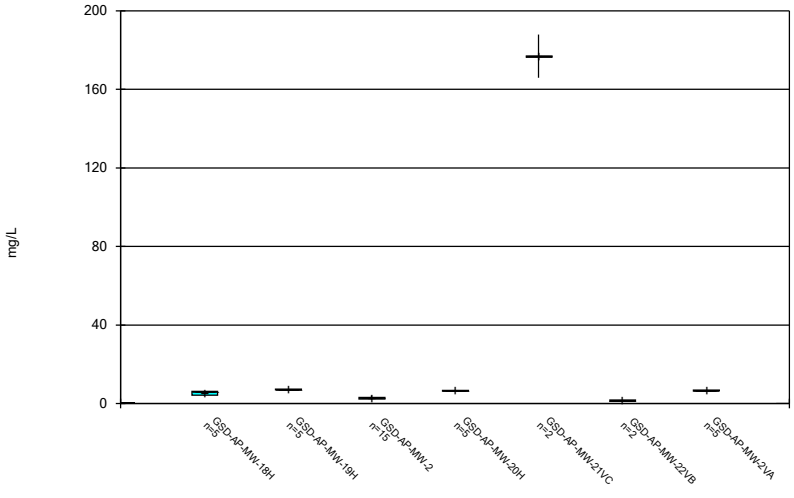
Box & Whiskers Plot



Constituent: Chloride Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

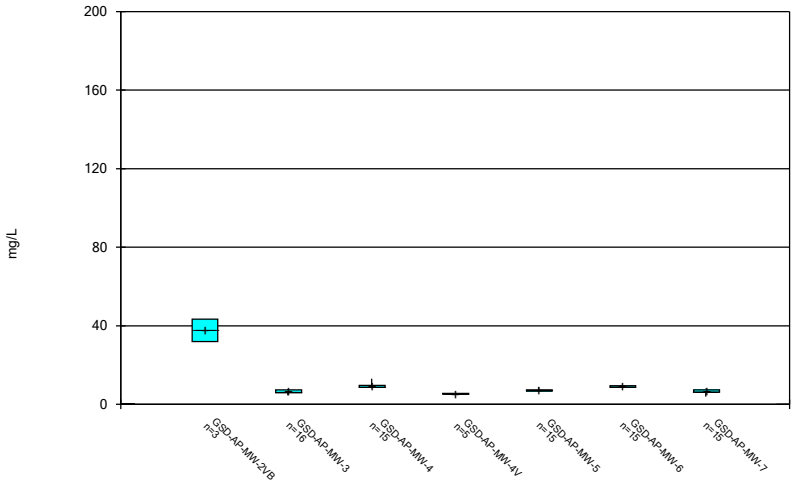
Box & Whiskers Plot



Constituent: Chloride Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

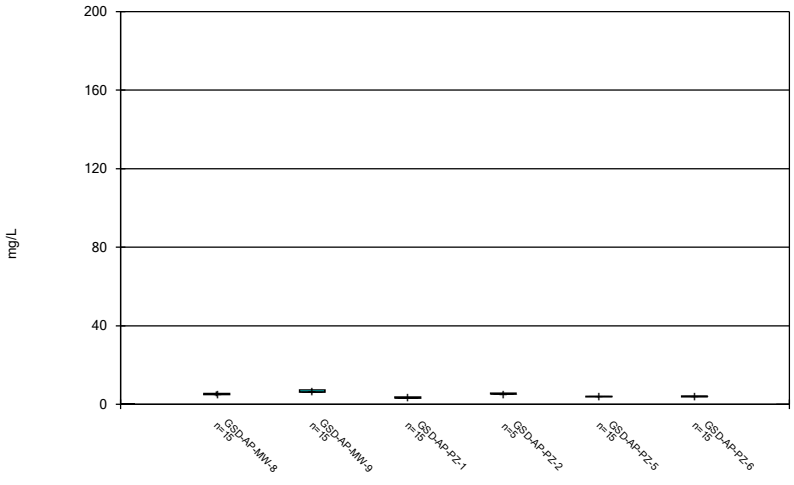
Box & Whiskers Plot



Constituent: Chloride Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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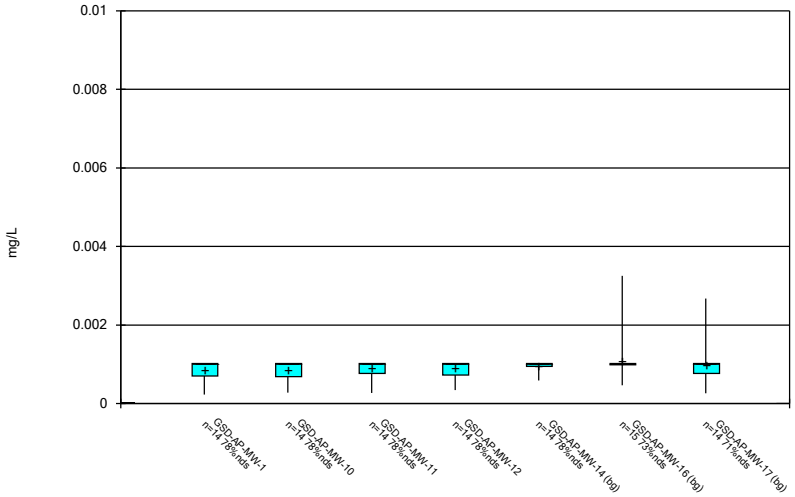
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

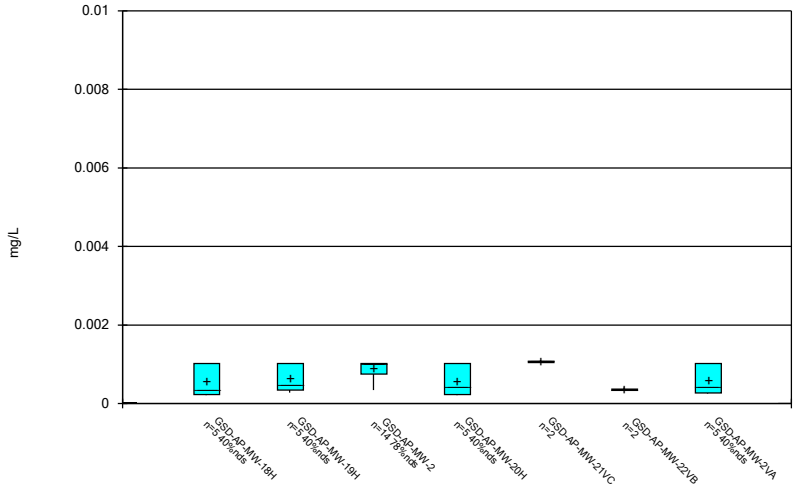
Box & Whiskers Plot



Constituent: Chromium Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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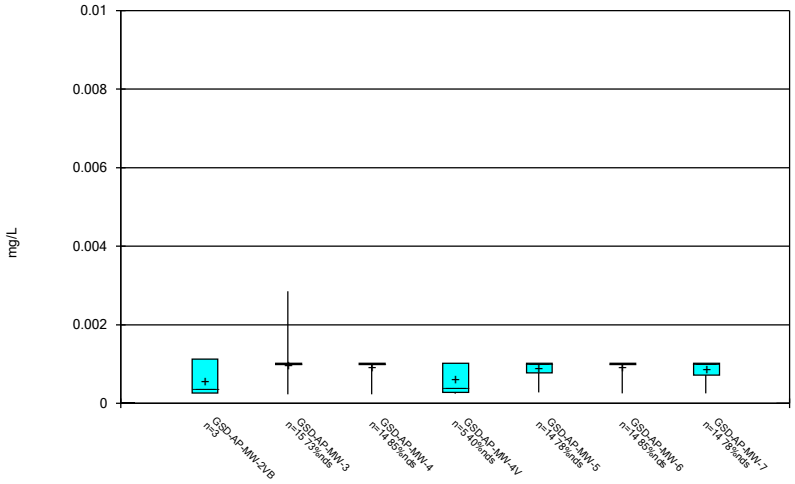
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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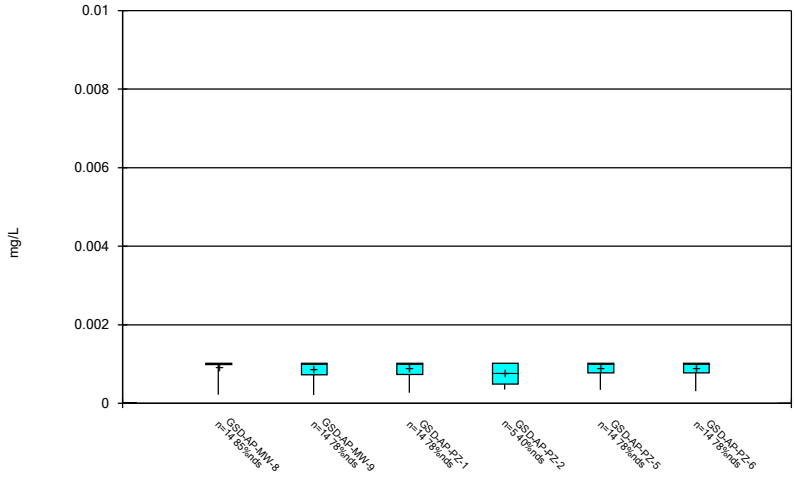
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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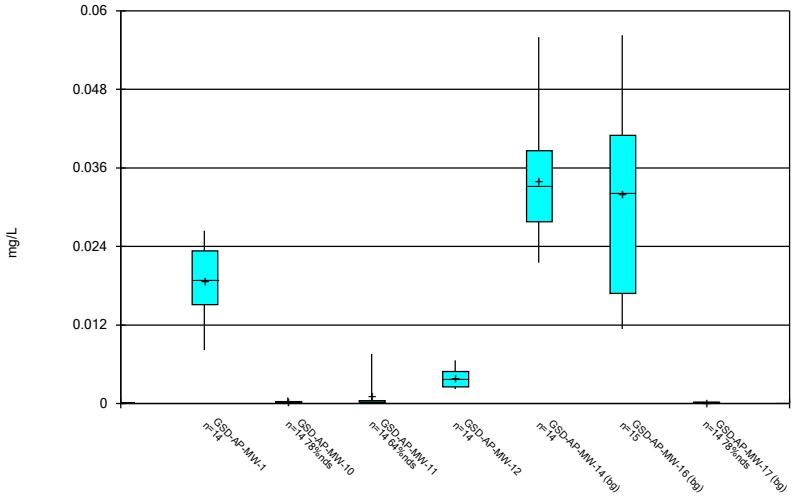
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

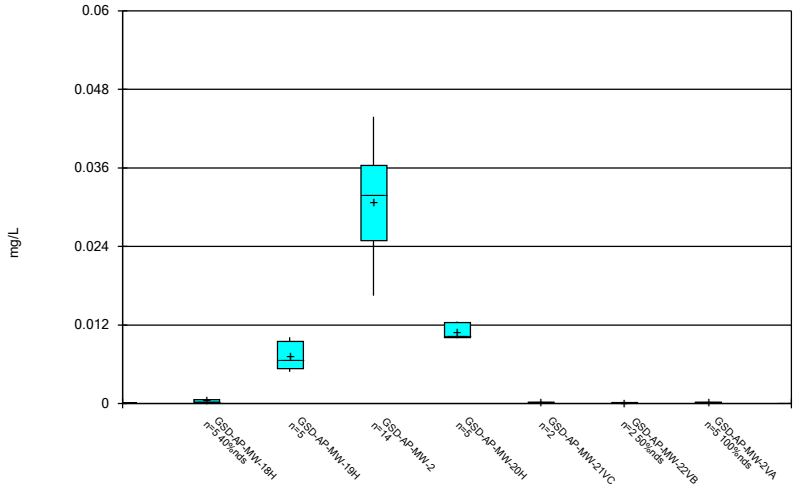
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

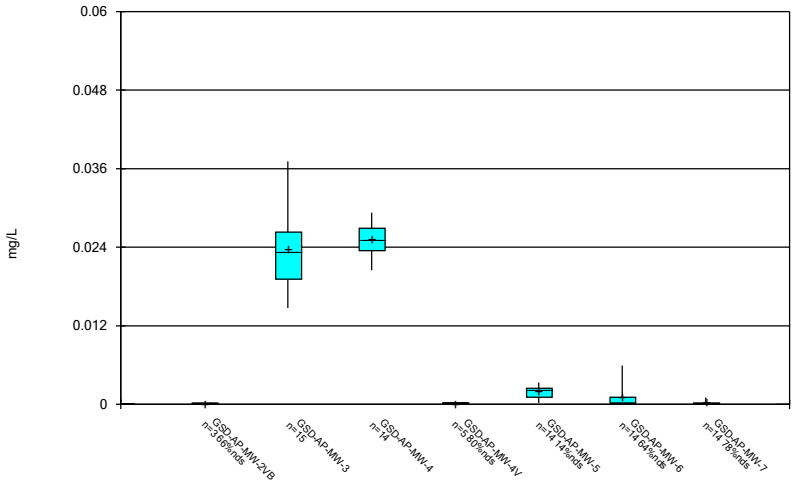
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

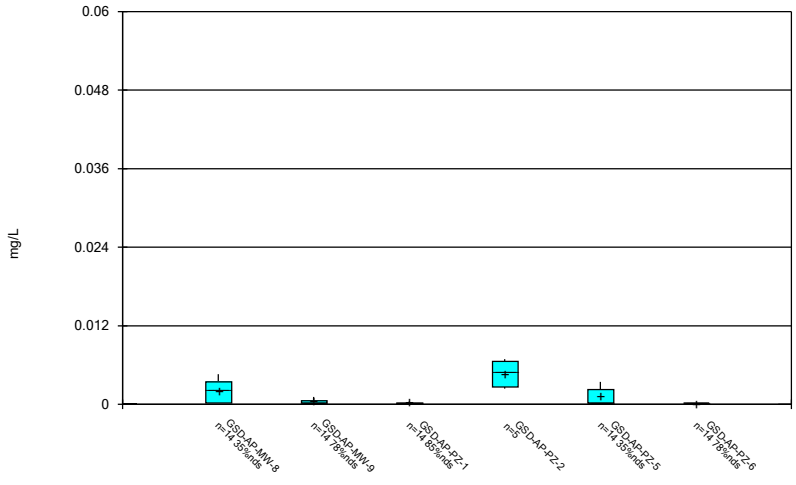
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

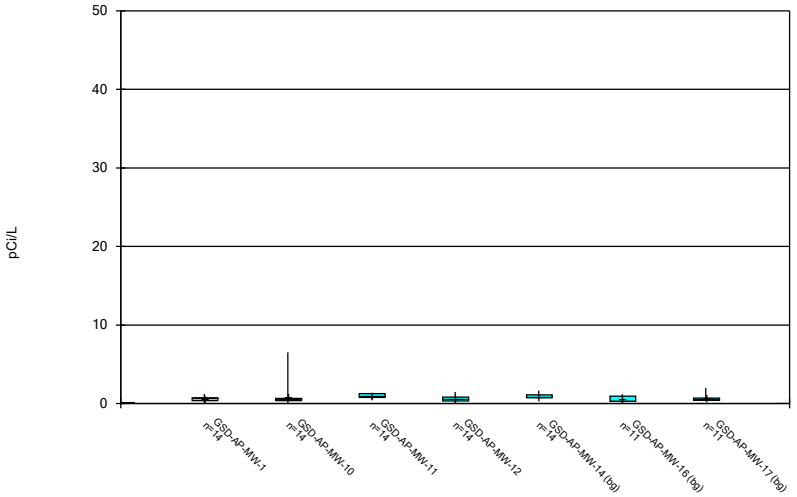
Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



Constituent: Cobalt Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

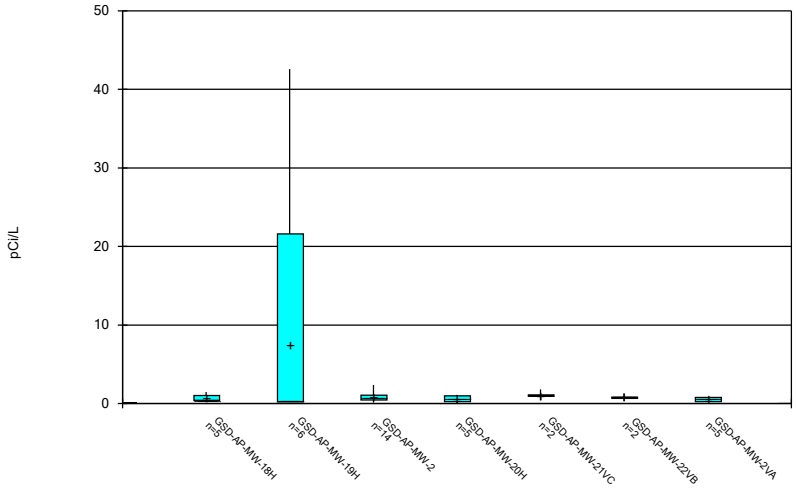
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

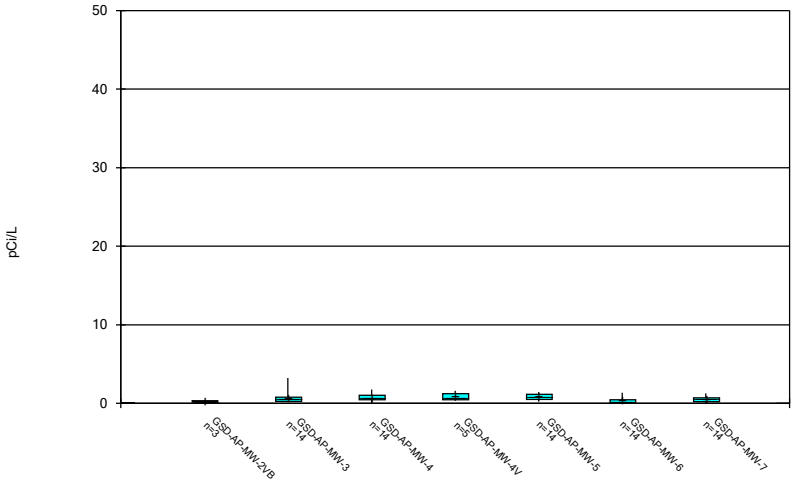
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

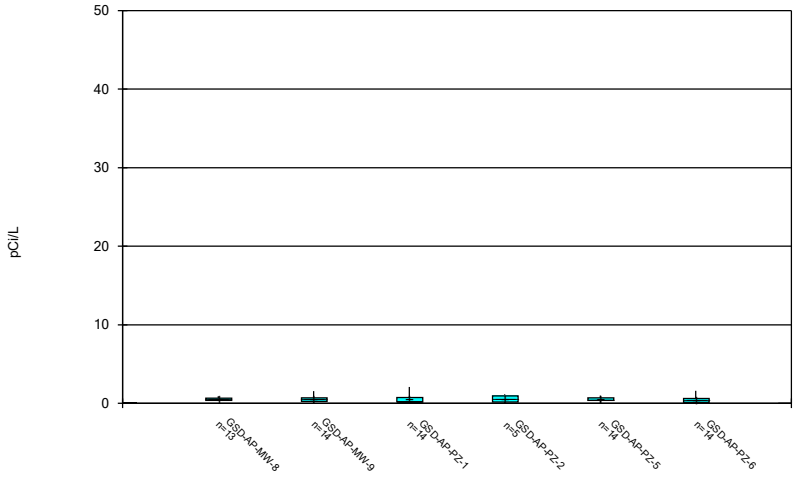
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

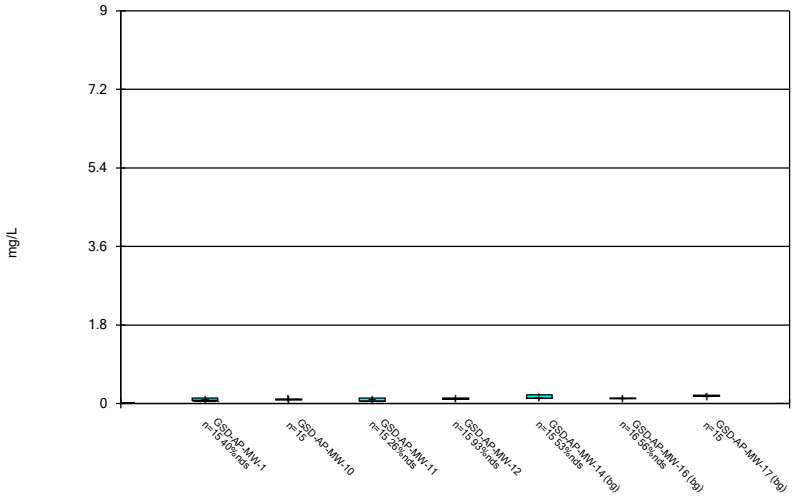
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

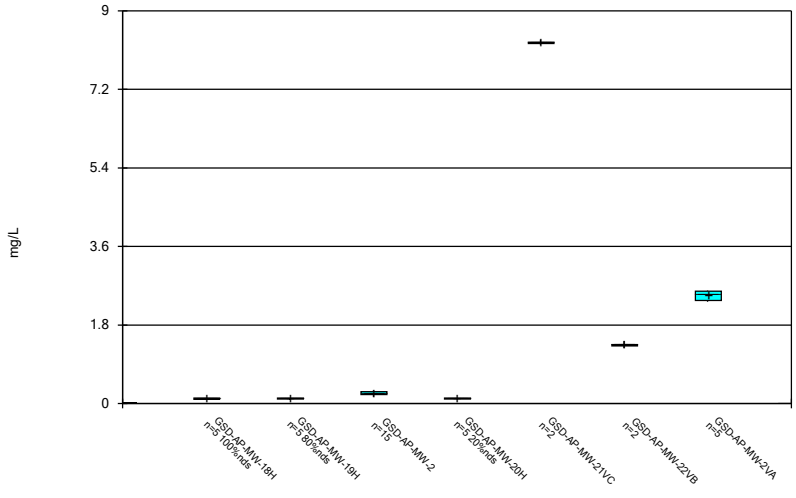
Box & Whiskers Plot



Constituent: Fluoride Analysis Run 7/18/2022 1:38 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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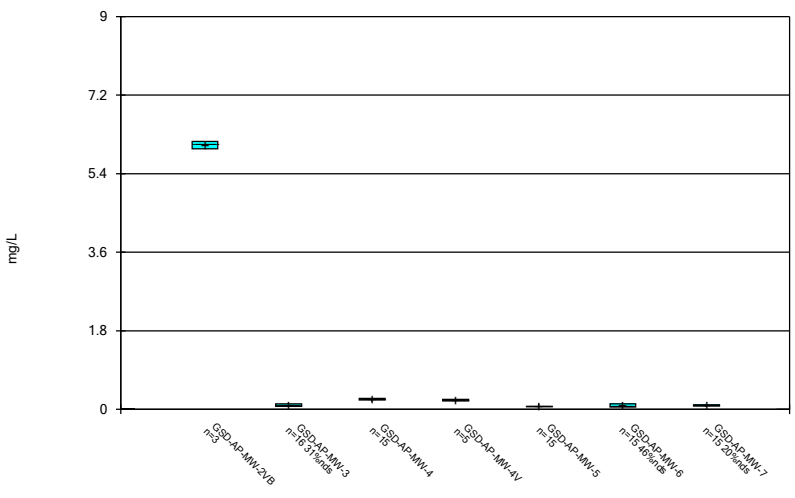
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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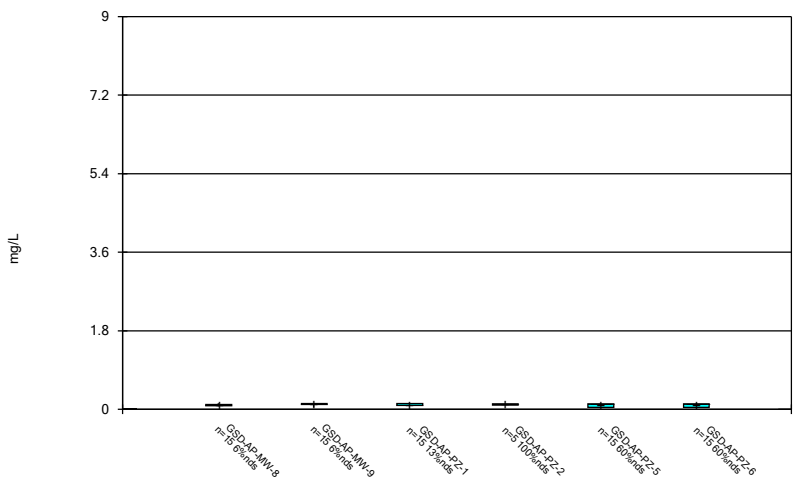
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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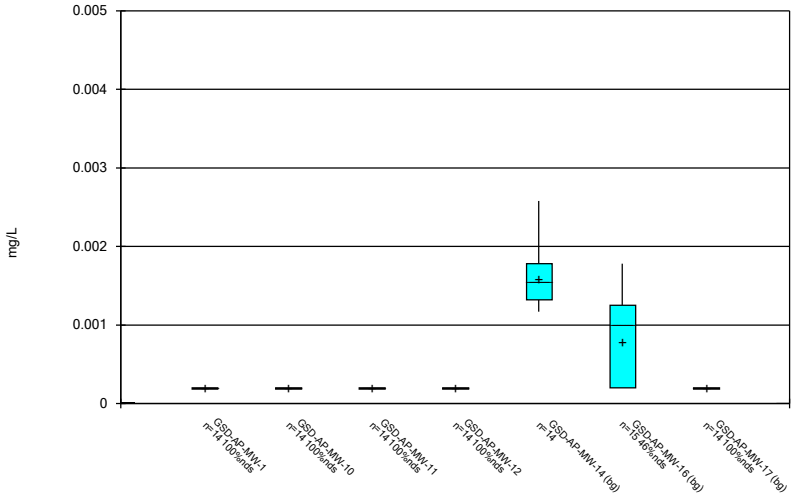
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

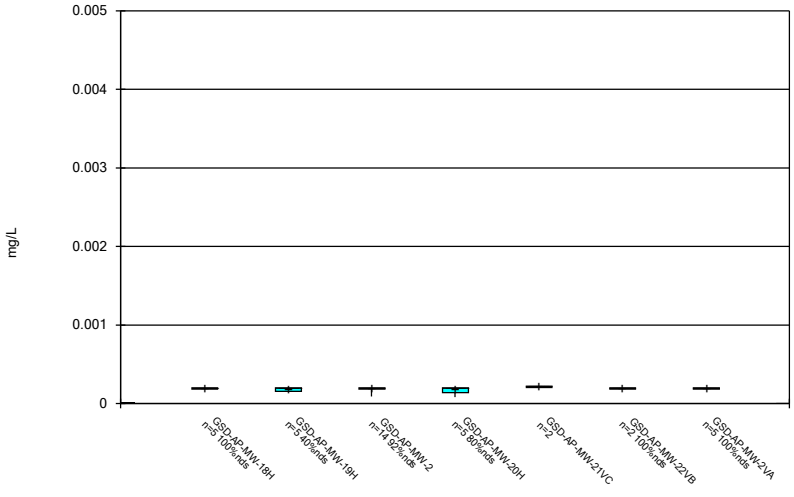
Box & Whiskers Plot



Constituent: Lead Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

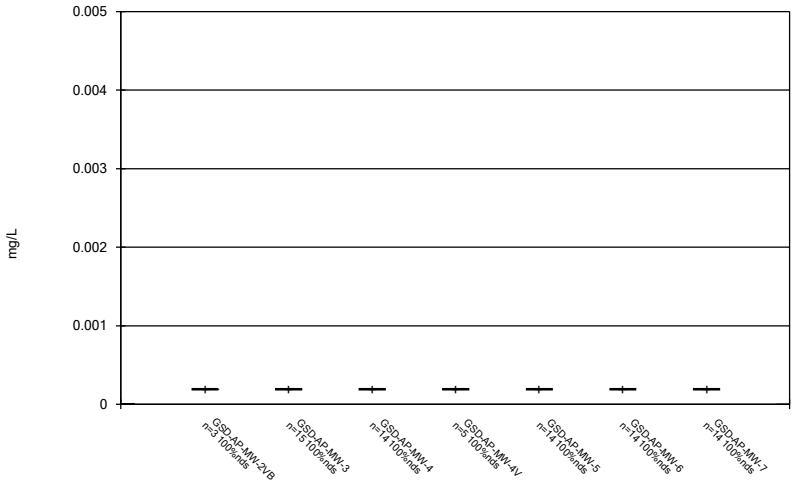
Box & Whiskers Plot



Constituent: Lead Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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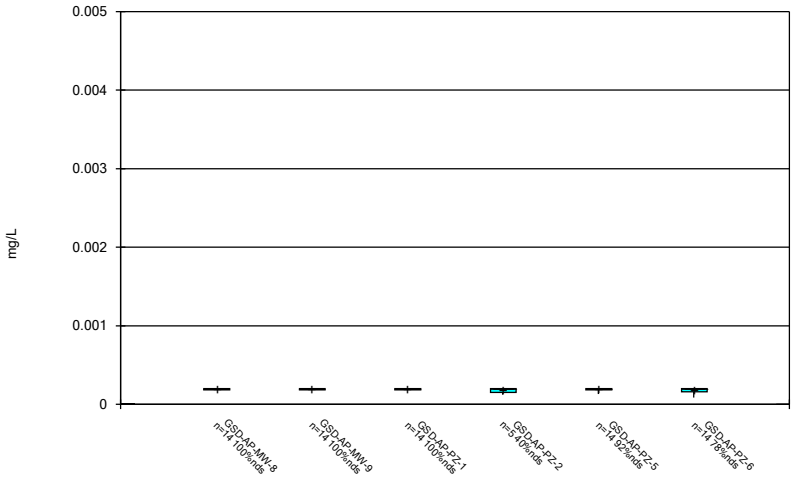
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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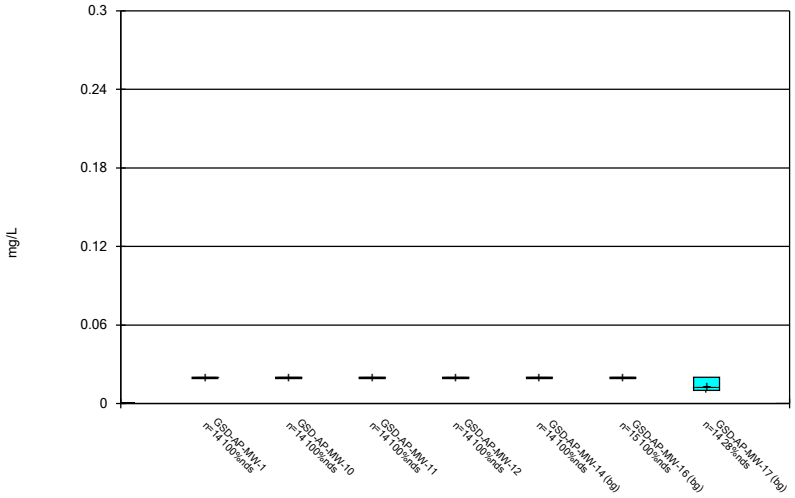
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

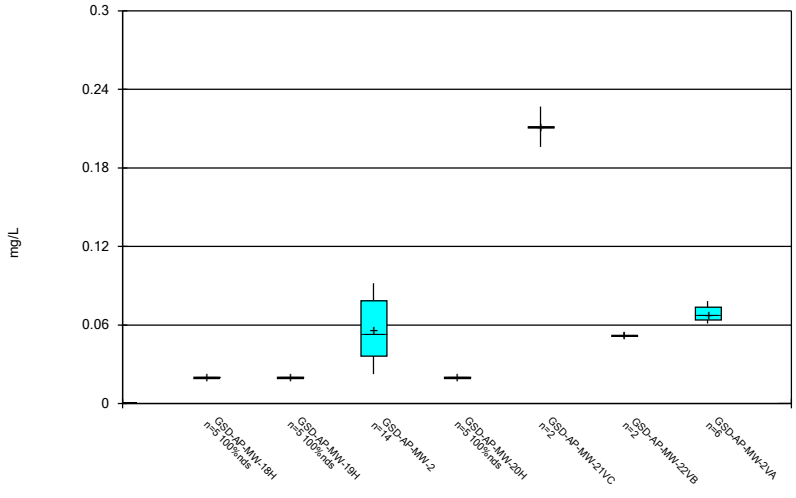
Box & Whiskers Plot



Constituent: Lithium Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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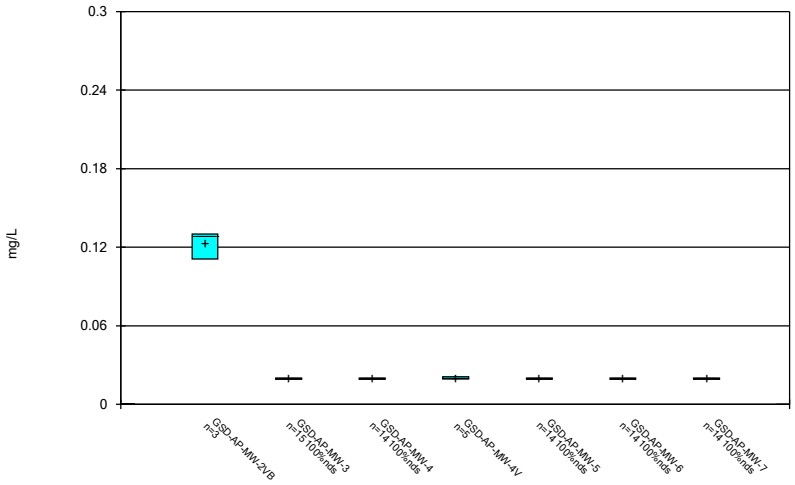
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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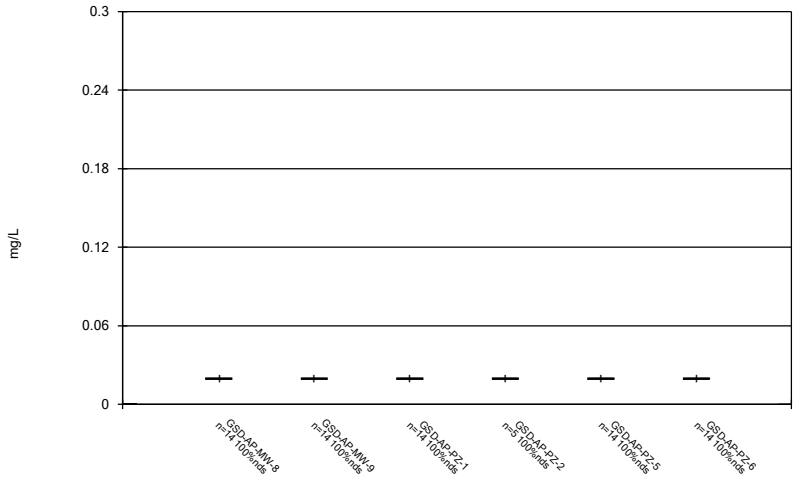
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

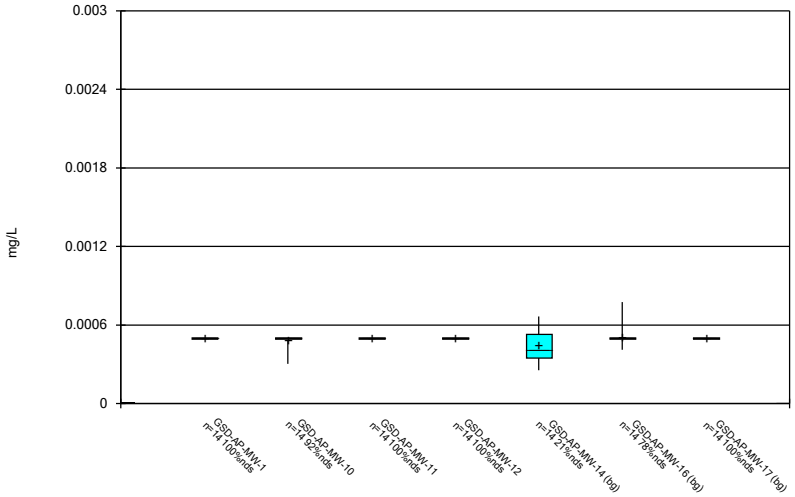
Box & Whiskers Plot



Constituent: Lithium Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

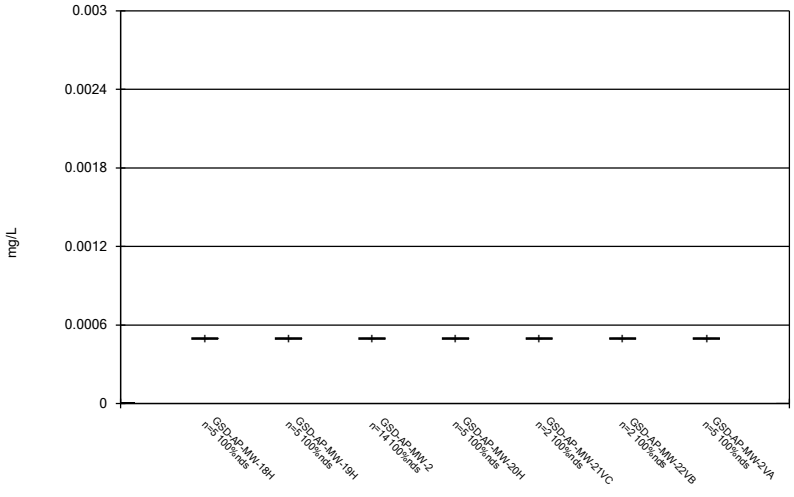
Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

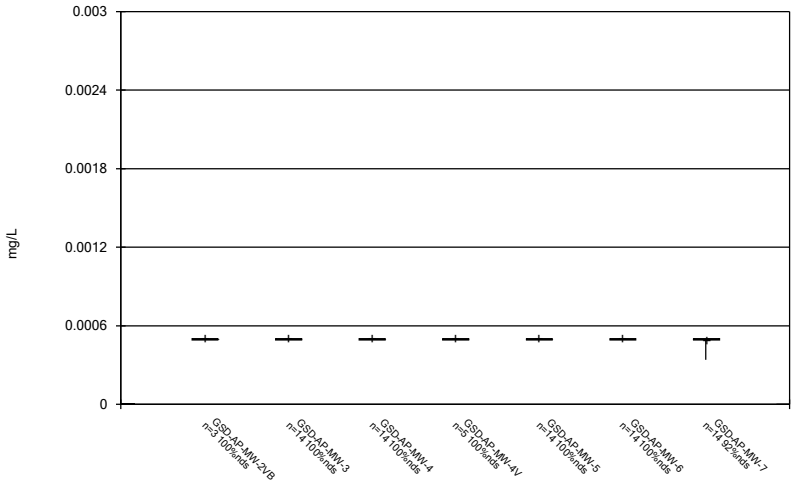
Box & Whiskers Plot



Constituent: Mercury Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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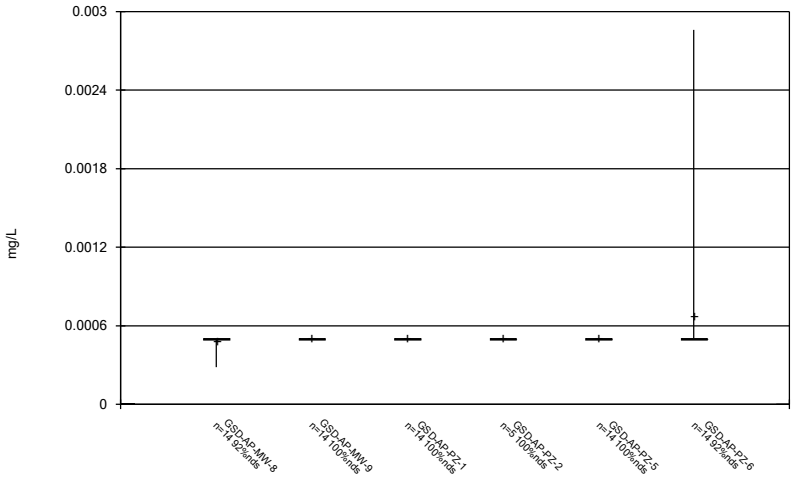
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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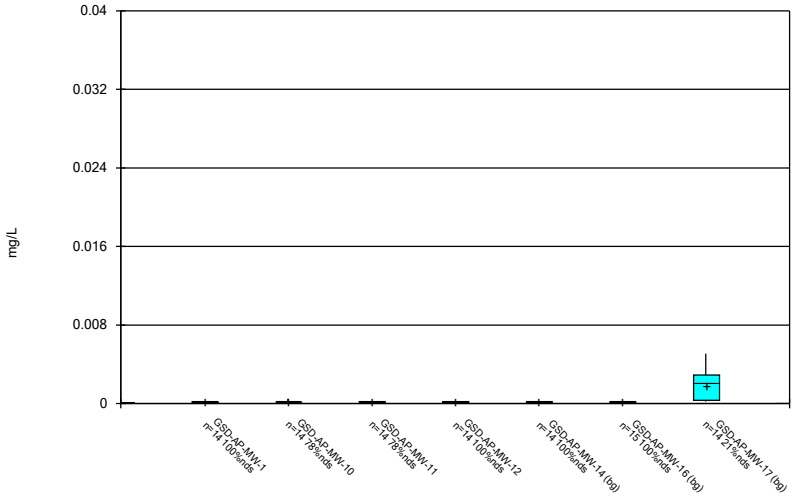
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

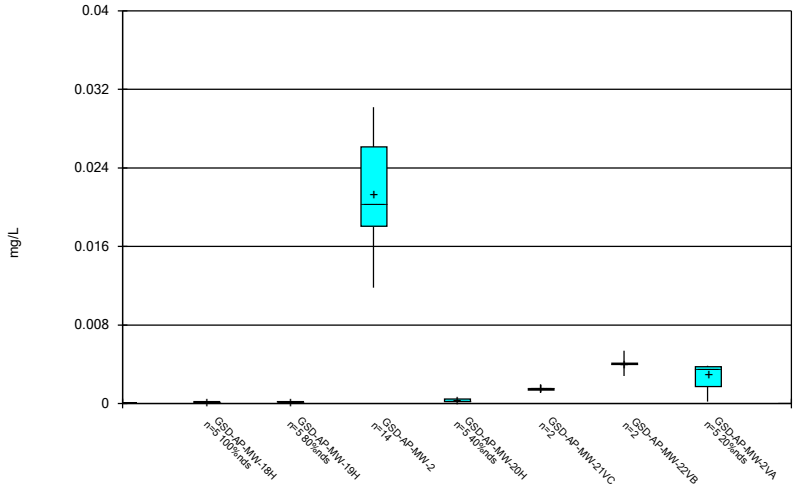
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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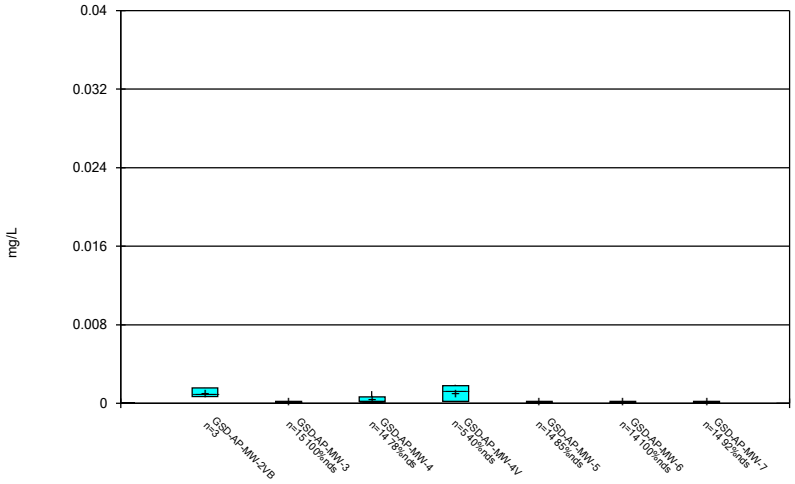
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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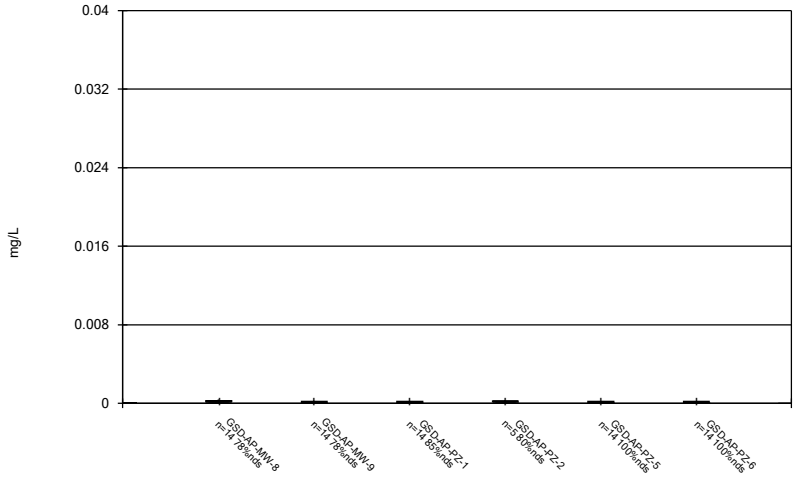
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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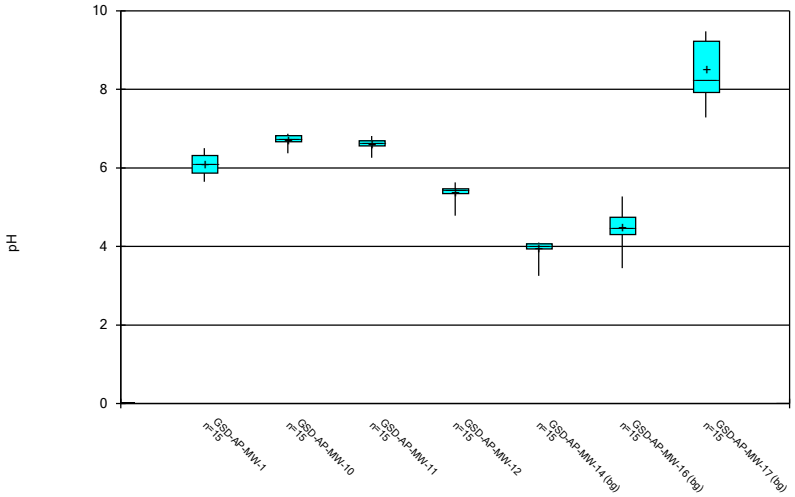
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

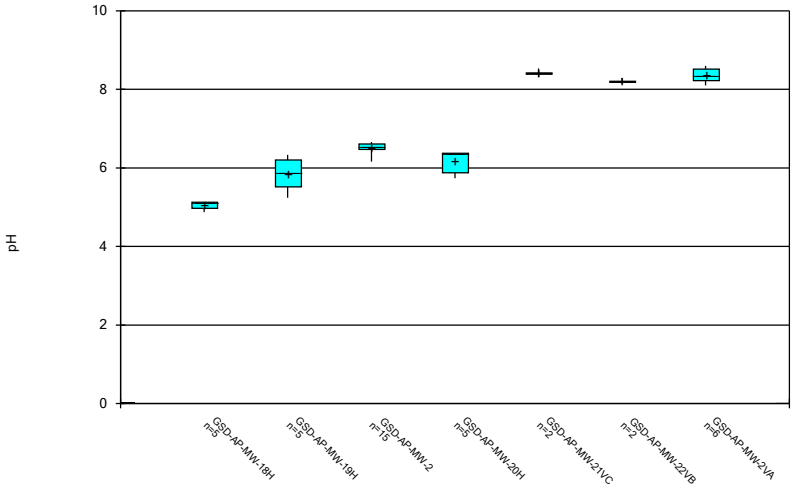
Box & Whiskers Plot



Constituent: pH Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

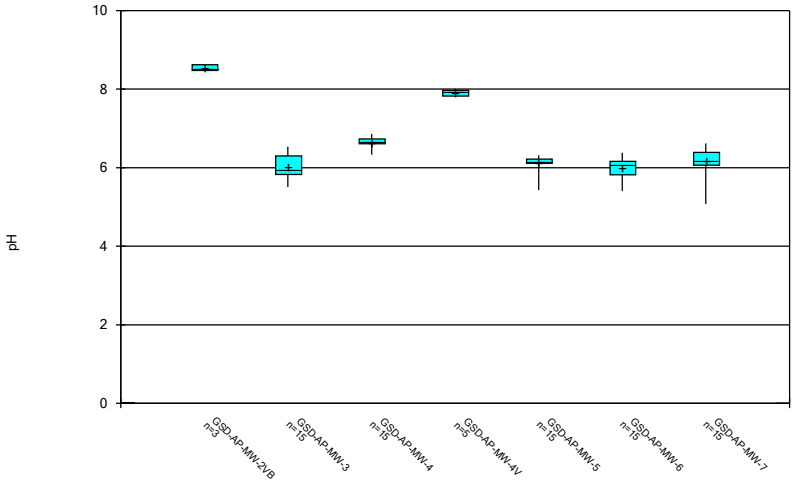
Box & Whiskers Plot



Constituent: pH Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



Constituent: pH Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

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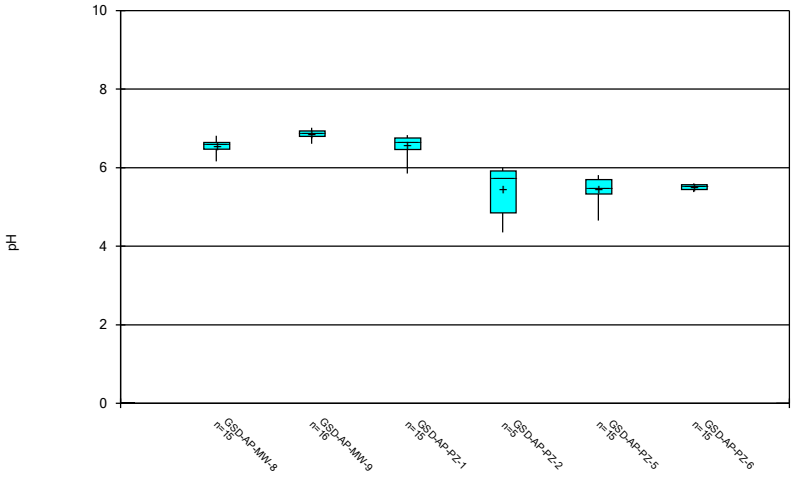
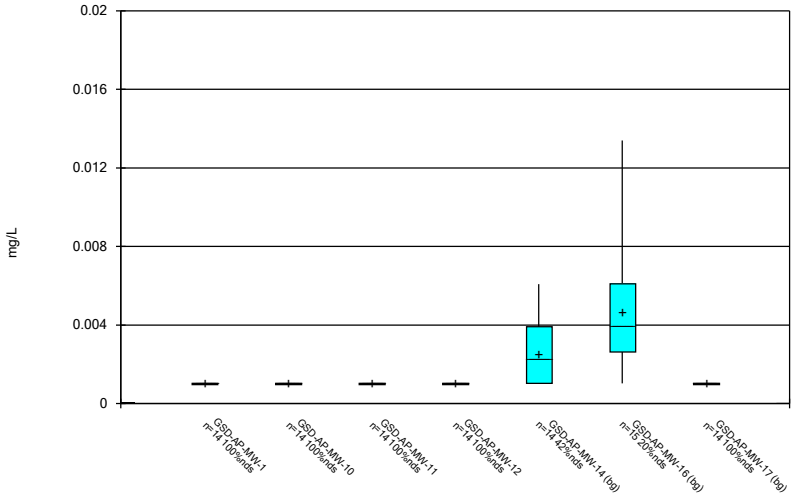


Constituent: pH Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

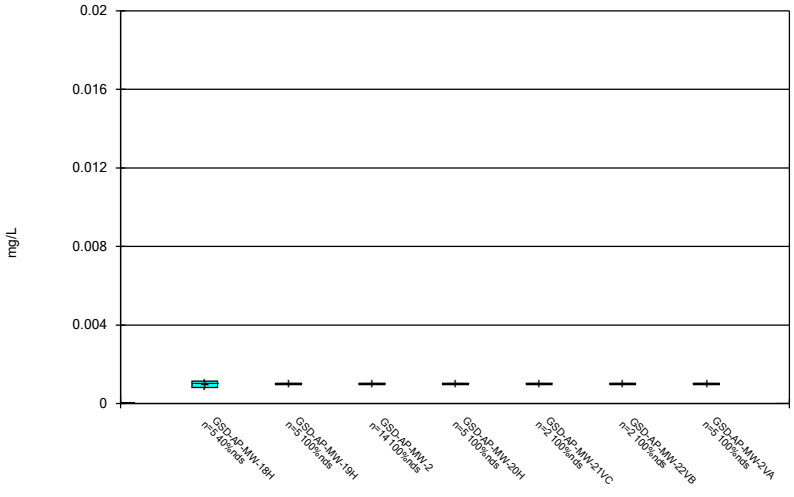
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

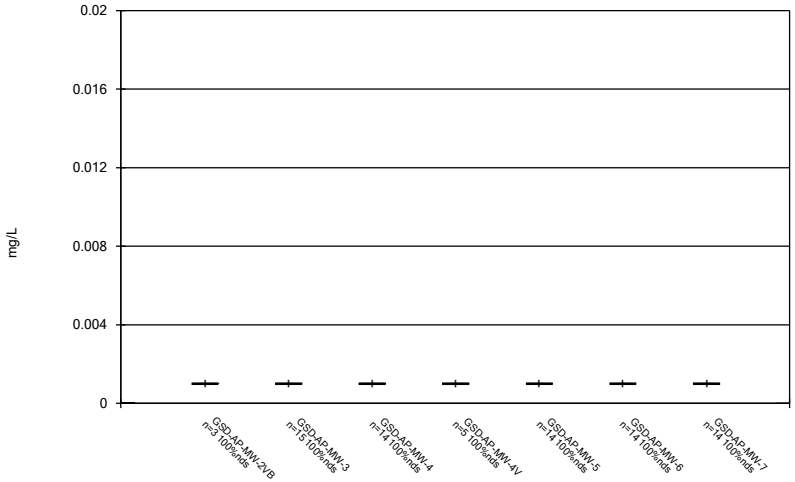
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

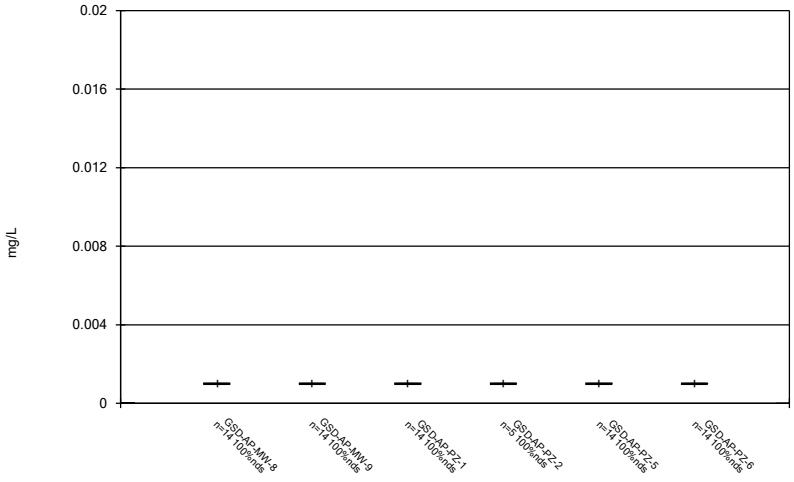
Box & Whiskers Plot



Constituent: Selenium Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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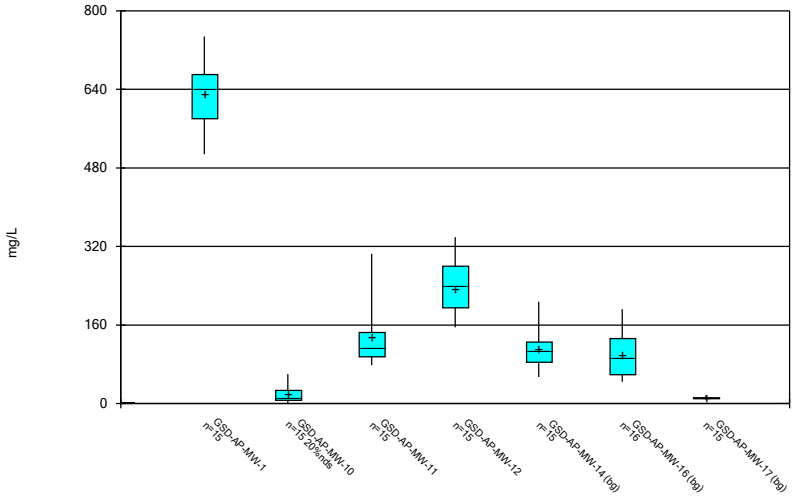
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

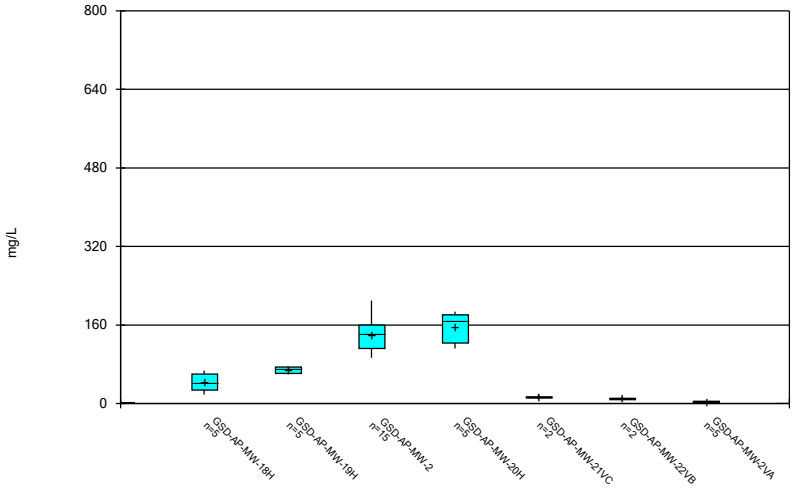
Box & Whiskers Plot



Constituent: Sulfate Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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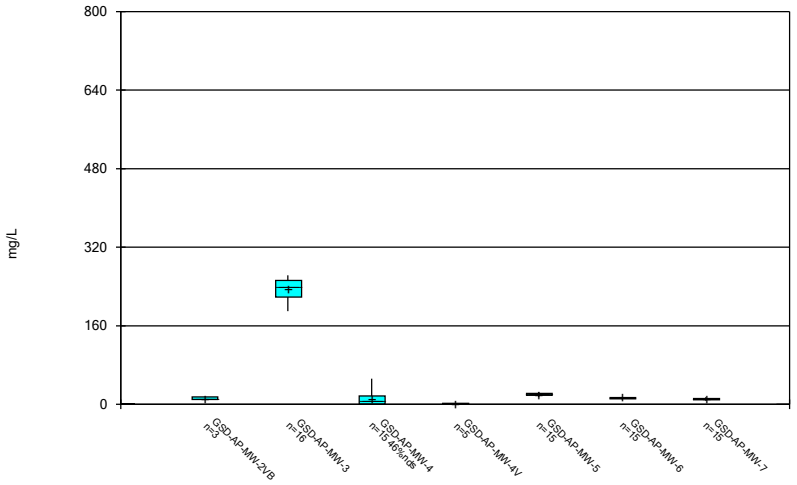
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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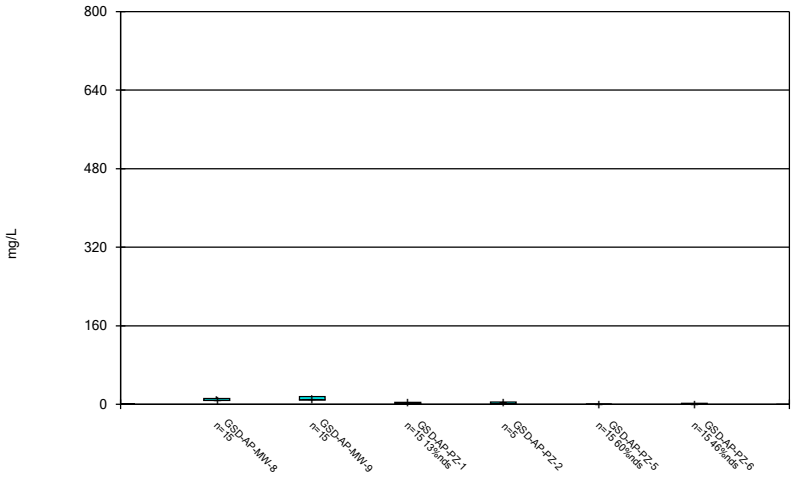
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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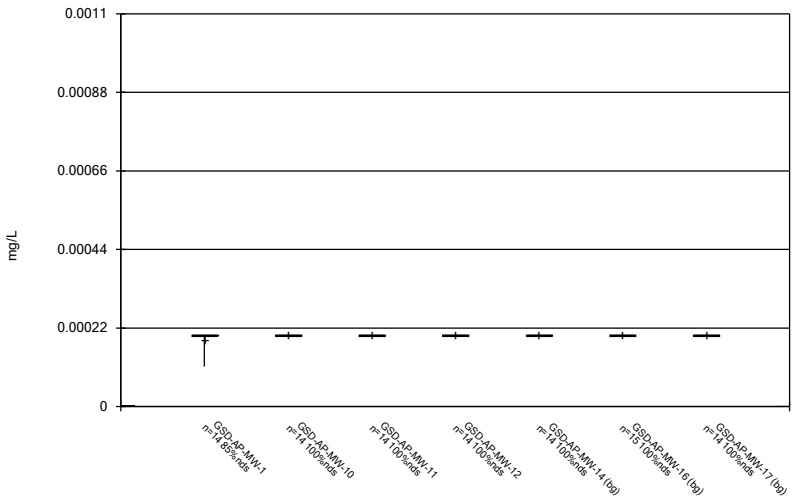
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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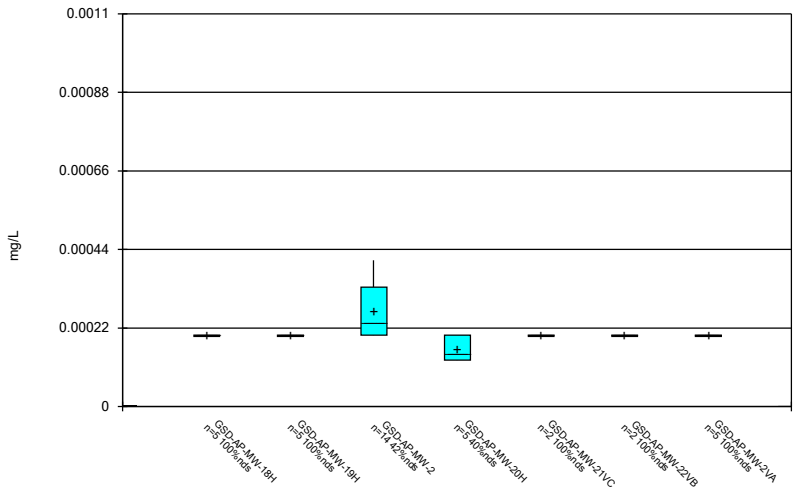
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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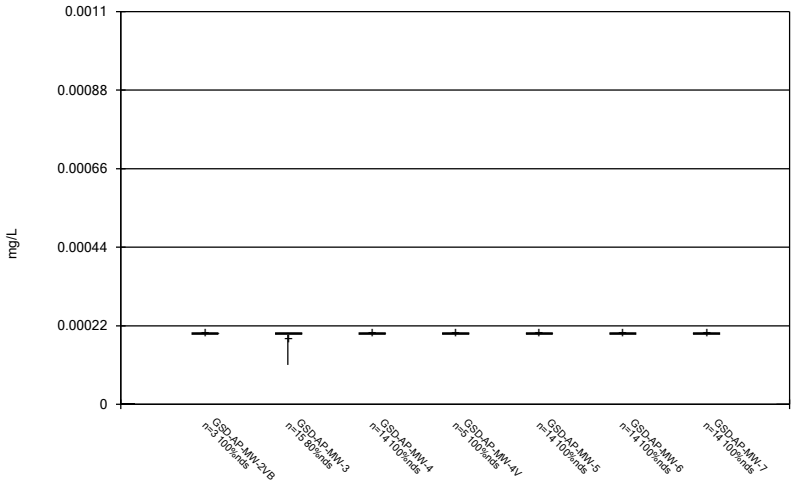
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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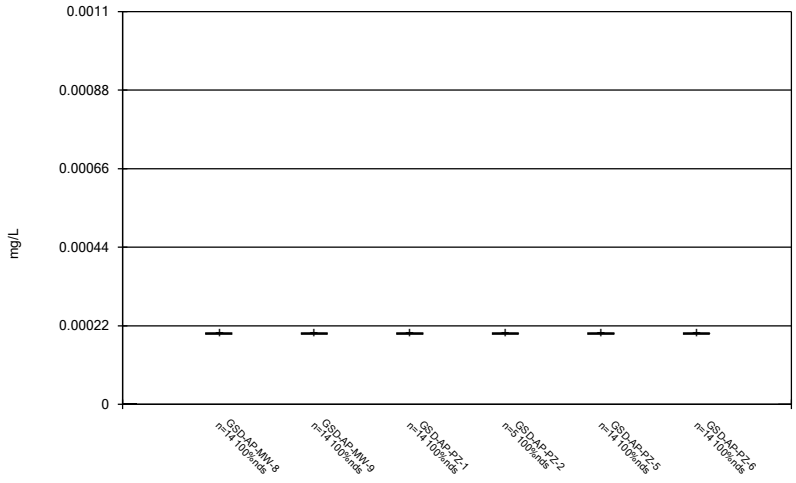
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



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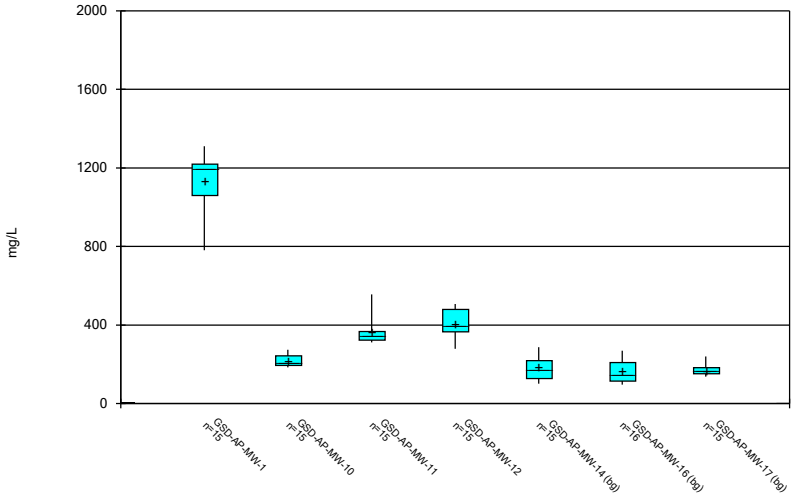
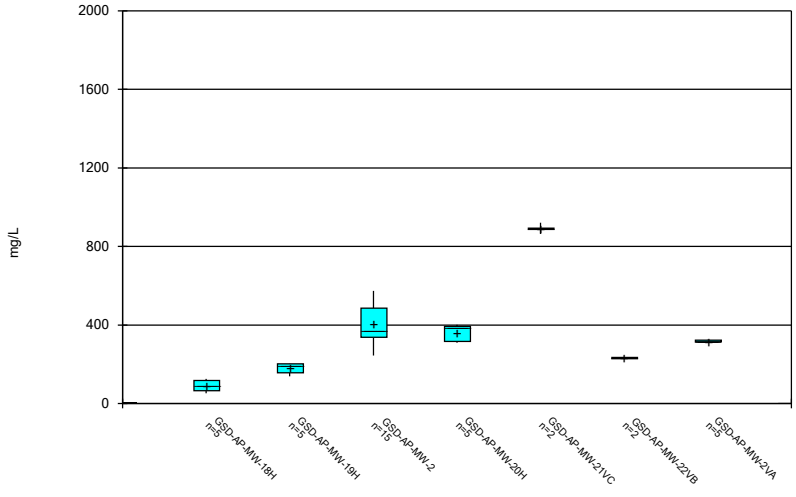
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

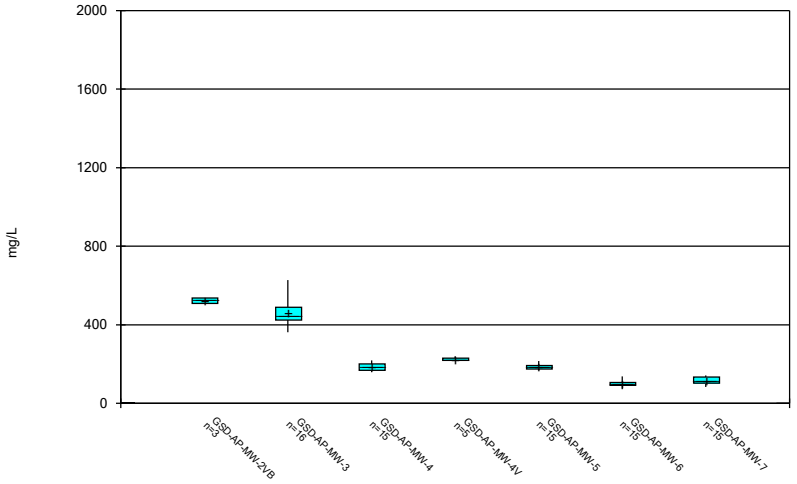
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

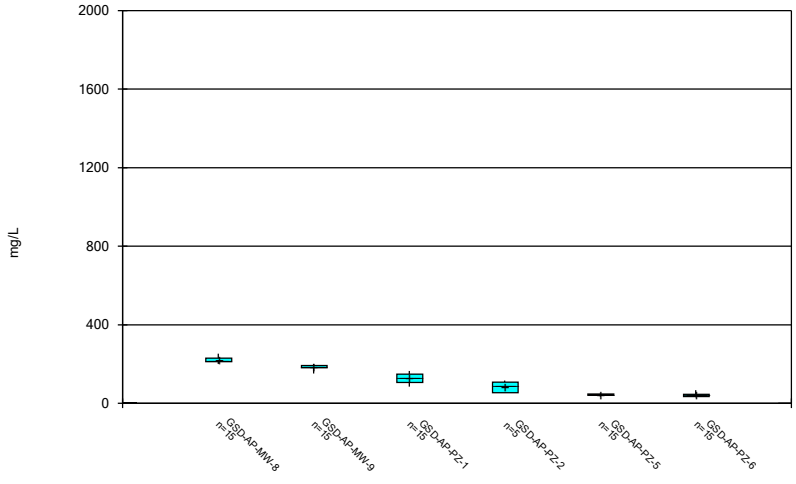
Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:39 PM View: Constituents View
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE C.

Outlier Summary

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:40 PM

	GSD-AP-MW-8 Combined Radium 226 + 228 (pCi/L)
12/7/2017	7.45 (o)

FIGURE D.

Interwell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GSD-AP-MW-1	0.1015	n/a	5/10/2022	0.954	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-11	0.1015	n/a	5/17/2022	0.139	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-2	0.1015	n/a	5/16/2022	0.381	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-3	0.1015	n/a	5/10/2022	0.998	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-4	0.1015	n/a	5/16/2022	0.342	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-5	0.1015	n/a	5/9/2022	0.261	Yes	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GSD-AP-MW-1	32.65	n/a	5/10/2022	166	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-10	32.65	n/a	5/10/2022	42.2	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-11	32.65	n/a	5/17/2022	80.6	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-12	32.65	n/a	5/10/2022	48.2	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-2	32.65	n/a	5/16/2022	58.2	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-3	32.65	n/a	5/10/2022	58.5	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-5	32.65	n/a	5/9/2022	38.4	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-8	32.65	n/a	5/11/2022	61.9	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-9	32.65	n/a	5/11/2022	36.9	Yes	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-1	4.063	n/a	5/10/2022	5.97	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-10	4.063	n/a	5/10/2022	5.72	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-11	4.063	n/a	5/17/2022	5.92	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-12	4.063	n/a	5/10/2022	5.64	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-3	4.063	n/a	5/10/2022	4.59	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-4	4.063	n/a	5/16/2022	8.07	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-5	4.063	n/a	5/9/2022	6.81	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-6	4.063	n/a	5/10/2022	8.87	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-8	4.063	n/a	5/11/2022	5.13	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-MW-9	4.063	n/a	5/11/2022	7.2	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	GSD-AP-PZ-5	4.063	n/a	5/10/2022	4.12	Yes	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	GSD-AP-MW-1	207	n/a	5/10/2022	508	Yes	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-3	207	n/a	5/10/2022	215	Yes	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-1	277.7	n/a	5/10/2022	780	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-11	277.7	n/a	5/17/2022	367	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	277.7	n/a	5/10/2022	319	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-3	277.7	n/a	5/10/2022	362	Yes	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:48 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**0.1015**	**n/a**	**5/10/2022**	**0.954**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-10	0.1015	n/a	5/10/2022	0.097J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-11**	**0.1015**	**n/a**	**5/17/2022**	**0.139**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-12	0.1015	n/a	5/10/2022	0.066J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	**GSD-AP-MW-2**	**0.1015**	**n/a**	**5/16/2022**	**0.381**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-3**	**0.1015**	**n/a**	**5/10/2022**	**0.998**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-4**	**0.1015**	**n/a**	**5/16/2022**	**0.342**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	**GSD-AP-MW-5**	**0.1015**	**n/a**	**5/9/2022**	**0.261**	**Yes**	**46**	**n/a**	**n/a**	**54.35**	**n/a**	**n/a**	**0.0008648**	**NP Inter (NDs) 1 of 2**
Boron (mg/L)	GSD-AP-MW-6	0.1015	n/a	5/10/2022	0.0681J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-7	0.1015	n/a	5/10/2022	0.0465J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-8	0.1015	n/a	5/11/2022	0.037J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-MW-9	0.1015	n/a	5/11/2022	0.0636J	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-1	0.1015	n/a	5/9/2022	0.1015ND	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-5	0.1015	n/a	5/10/2022	0.1015ND	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Boron (mg/L)	GSD-AP-PZ-6	0.1015	n/a	5/10/2022	0.1015ND	No	46	n/a	n/a	54.35	n/a	n/a	0.0008648	NP Inter (NDs) 1 of 2
Calcium (mg/L)	**GSD-AP-MW-1**	**32.65**	**n/a**	**5/10/2022**	**166**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-10**	**32.65**	**n/a**	**5/10/2022**	**42.2**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-11**	**32.65**	**n/a**	**5/17/2022**	**80.6**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-12**	**32.65**	**n/a**	**5/10/2022**	**48.2**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-2**	**32.65**	**n/a**	**5/16/2022**	**58.2**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-3**	**32.65**	**n/a**	**5/10/2022**	**58.5**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-4	32.65	n/a	5/16/2022	30.7	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-5**	**32.65**	**n/a**	**5/9/2022**	**38.4**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-MW-6	32.65	n/a	5/10/2022	10.8	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-MW-7	32.65	n/a	5/10/2022	9.95	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	**GSD-AP-MW-8**	**32.65**	**n/a**	**5/11/2022**	**61.9**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	**GSD-AP-MW-9**	**32.65**	**n/a**	**5/11/2022**	**36.9**	**Yes**	**46**	**4.248**	**0.6813**	**0**	**None**	**sqrt(x)**	**0.0005016**	**Param Inter 1 of 2**
Calcium (mg/L)	GSD-AP-PZ-1	32.65	n/a	5/9/2022	18.9	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-5	32.65	n/a	5/10/2022	2.87	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Calcium (mg/L)	GSD-AP-PZ-6	32.65	n/a	5/10/2022	3.24	No	46	4.248	0.6813	0	None	sqrt(x)	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-1**	**4.063**	**n/a**	**5/10/2022**	**5.97**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-10**	**4.063**	**n/a**	**5/10/2022**	**5.72**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-11**	**4.063**	**n/a**	**5/17/2022**	**5.92**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-12**	**4.063**	**n/a**	**5/10/2022**	**5.64**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-2	4.063	n/a	5/16/2022	2.18	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-3**	**4.063**	**n/a**	**5/10/2022**	**4.59**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-4**	**4.063**	**n/a**	**5/16/2022**	**8.07**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-5**	**4.063**	**n/a**	**5/9/2022**	**6.81**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-6**	**4.063**	**n/a**	**5/10/2022**	**8.87**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-MW-7	4.063	n/a	5/10/2022	3.96	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-MW-8**	**4.063**	**n/a**	**5/11/2022**	**5.13**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	**GSD-AP-MW-9**	**4.063**	**n/a**	**5/11/2022**	**7.2**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-1	4.063	n/a	5/9/2022	3.46	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Chloride (mg/L)	**GSD-AP-PZ-5**	**4.063**	**n/a**	**5/10/2022**	**4.12**	**Yes**	**46**	**3.251**	**0.3775**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Chloride (mg/L)	GSD-AP-PZ-6	4.063	n/a	5/10/2022	3.68	No	46	3.251	0.3775	0	None	No	0.0005016	Param Inter 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-1**	**207**	**n/a**	**5/10/2022**	**508**	**Yes**	**46**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008648**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-10	207	n/a	5/10/2022	11.6	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-11	207	n/a	5/17/2022	145	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-12	207	n/a	5/10/2022	193	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-2	207	n/a	5/16/2022	93.1	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	**GSD-AP-MW-3**	**207**	**n/a**	**5/10/2022**	**215**	**Yes**	**46**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0008648**	**NP Inter (normality) 1 of 2**
Sulfate (mg/L)	GSD-AP-MW-4	207	n/a	5/16/2022	51.8	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-5	207	n/a	5/9/2022	15.5	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-6	207	n/a	5/10/2022	14.8	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-7	207	n/a	5/10/2022	7.13	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-8	207	n/a	5/11/2022	11.8	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-MW-9	207	n/a	5/11/2022	17.7	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-1	207	n/a	5/9/2022	2.51	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-5	207	n/a	5/10/2022	1.02J	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GSD-AP-PZ-6	207	n/a	5/10/2022	1.28J	No	46	n/a	n/a	0	n/a	n/a	0.0008648	NP Inter (normality) 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**277.7**	**n/a**	**5/10/2022**	**780**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-10	277.7	n/a	5/10/2022	199	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**277.7**	**n/a**	**5/17/2022**	**367**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-12**	**277.7**	**n/a**	**5/10/2022**	**319**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-2	277.7	n/a	5/16/2022	244	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**277.7**	**n/a**	**5/10/2022**	**362**	**Yes**	**46**	**171.2**	**49.52**	**0**	**None**	**No**	**0.0005016**	**Param Inter 1 of 2**
Total Dissolved Solids (mg/L)	GSD-AP-MW-4	277.7	n/a	5/16/2022	218	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-5	277.7	n/a	5/9/2022	174	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:48 PM

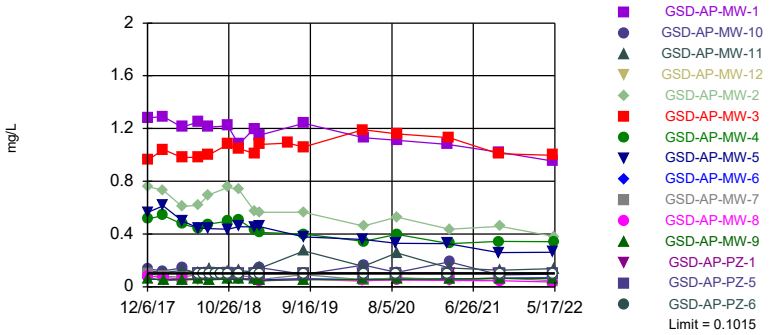
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Total Dissolved Solids (mg/L)	GSD-AP-MW-6	277.7	n/a	5/10/2022	73.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-7	277.7	n/a	5/10/2022	82.7	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-8	277.7	n/a	5/11/2022	216	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-MW-9	277.7	n/a	5/11/2022	181	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-1	277.7	n/a	5/9/2022	85.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-5	277.7	n/a	5/10/2022	33.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2
Total Dissolved Solids (mg/L)	GSD-AP-PZ-6	277.7	n/a	5/10/2022	33.3	No	46	171.2	49.52	0	None	No	0.0005016	Param Inter 1 of 2

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 46 background values. 54.35% NDs. Annual per-constituent alpha = 0.02562. Individual comparison alpha = 0.0008648 (1 of 2). Comparing 15 points to limit.

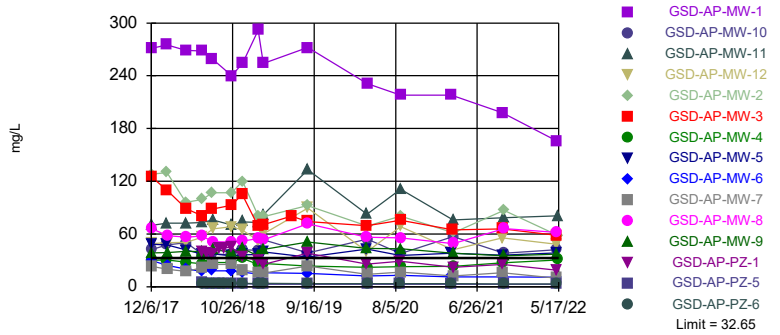
Constituent: Boron Analysis Run 7/18/2022 1:46 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-2, GSD-AP-MW-3, GSD-AP-MW-5...

Prediction Limit

Interwell Parametric



Background Data Summary (based on square root transformation): Mean=4.248, Std. Dev.=0.6813, n=46. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9385, critical = 0.927. Kappa = 2.151 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 15 points to limit.

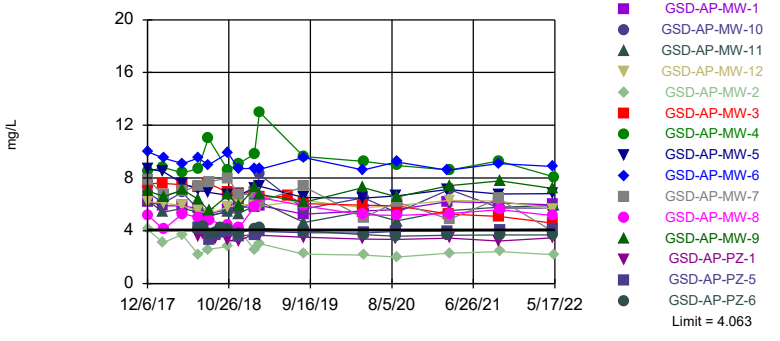
Constituent: Calcium Analysis Run 7/18/2022 1:46 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-10, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3, GSD-AP-MW-4, GSD-AP-MW-5...

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=3.251, Std. Dev.=0.3775, n=46. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9758, critical = 0.927. Kappa = 2.151 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 15 points to limit.

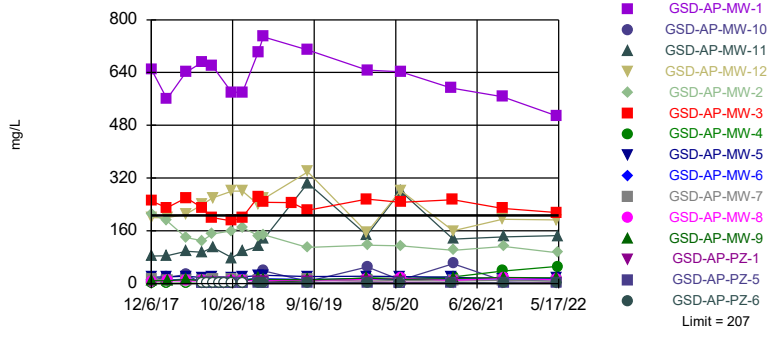
Constituent: Chloride Analysis Run 7/18/2022 1:46 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-3

Prediction Limit

Interwell Non-parametric



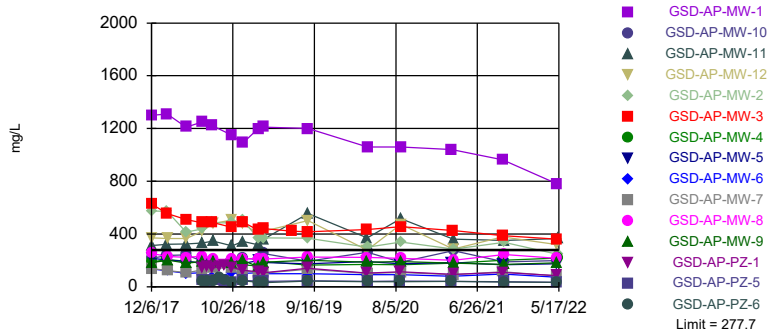
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 46 background values. Annual per-constituent alpha = 0.02562. Individual comparison alpha = 0.0008648 (1 of 2). Comparing 15 points to limit.

Constituent: Sulfate Analysis Run 7/18/2022 1:46 PM View: Appendix III - Interwell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Exceeds Limit: GSD-AP-MW-1, GSD-AP-MW-11, GSD-AP-MW-12, GSD-AP-MW-3

Prediction Limit

Interwell Parametric



Background Data Summary: Mean=171.2, Std. Dev.=49.52, n=46. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9354, critical = 0.927. Kappa = 2.151 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005016. Comparing 15 points to limit.

Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:46 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-4
12/6/2017	1.28	0.12	0.135	0.959	0.0605 (J)	0.758			
12/7/2017							0.063 (J)	0.0614 (J)	0.515
2/6/2018	1.29			1.04		0.733			0.541
2/7/2018		0.109	0.12						
2/8/2018					0.0527 (J)		0.0508 (J)	0.0531 (J)	
4/23/2018	1.21					0.608			
4/24/2018		0.124	0.144	0.979	0.0476 (J)				0.475
4/25/2018							0.0548 (J)	0.0551 (J)	
6/26/2018	1.25						0.0571 (J)	0.0568 (J)	0.444
6/27/2018		0.111	0.0903 (J)	0.982	0.0539 (J)	0.619			
7/18/2018									
8/6/2018									0.474
8/7/2018	1.21		0.106	1		0.697	0.0571 (J)		
8/8/2018		0.135			0.0637 (J)			0.0524 (J)	
9/5/2018									
9/24/2018									
10/22/2018	1.22		0.107	1.08		0.754			0.496
10/23/2018		0.114			0.0696 (J)		0.0636 (J)	0.0576 (J)	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				1.05			0.0568 (J)		0.51
12/4/2018	1.08	0.124	0.103			0.737			
12/5/2018					0.0652 (J)			0.0561 (J)	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	1.2			1.01		0.575	0.0509 (J)		0.43
2/6/2019		0.112	0.105		0.0511 (J)			0.0627 (J)	
2/7/2019									
2/25/2019				1.08					
2/26/2019	1.15		0.146			0.566	0.0527 (J)		0.411
2/27/2019		0.14			0.0494 (J)			0.0474 (J)	
2/28/2019									
6/18/2019				1.09					
6/24/2019									
8/19/2019									
8/20/2019				1.06		0.566	0.0608 (J)		0.399
8/21/2019	1.24							0.0524 (J)	
8/22/2019		0.272	0.0951 (J)		0.0625 (J)				
4/13/2020				1.19			0.0561 (J)		
4/14/2020		0.154			0.0377 (J)			0.0562 (J)	
4/15/2020	1.13		0.164			0.461			0.344
4/16/2020									
8/24/2020									
8/25/2020	1.11					0.528			
8/26/2020		0.257	0.108	1.16	0.0698 (J)		0.0633 (J)	0.0565 (J)	0.398
3/16/2021	1.08								
3/17/2021							0.0563 (J)		
3/22/2021				1.13					
3/23/2021		0.142	0.188		0.0452 (J)			0.0609 (J)	
3/24/2021						0.437			0.326

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-4
10/5/2021	1.02			1.01	0.0661 (J)		0.0649 (J)		0.344
10/6/2021									
10/11/2021			0.09 (J)			0.459			
10/12/2021		0.125						0.0632 (J)	
5/9/2022									
5/10/2022	0.954		0.097 (J)	0.998	0.066 (J)		0.0681 (J)		
5/11/2022								0.0636 (J)	
5/16/2022						0.381			0.342
5/17/2022		0.139							

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-14 ...	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	0.566	0.0828 (J)	0.102						
2/6/2018	0.614								
2/7/2018									
2/8/2018		0.0691 (J)	0.0787 (J)						
4/23/2018									
4/24/2018									
4/25/2018	0.498	0.0571 (J)	0.0734 (J)						
6/26/2018		0.0634 (J)	0.094 (J)						
6/27/2018	0.446			<0.1015	<0.1015	<0.1015	<0.1015		
7/18/2018				<0.1015	<0.1015	<0.1015	<0.1015		
8/6/2018				<0.1015					
8/7/2018	0.442				<0.1015				
8/8/2018		0.0659 (J)	0.103			<0.1015	<0.1015		
9/5/2018				<0.1015	<0.1015	<0.1015	<0.1015		
9/24/2018				<0.1015	<0.1015	<0.1015	<0.1015		
10/22/2018					<0.1015				
10/23/2018	0.436	0.0666 (J)	0.106			<0.1015	<0.1015		
10/24/2018				<0.1015				0.0357 (J)	0.0261 (J)
11/14/2018								0.0348 (J)	0.0209 (J)
11/28/2018								0.0313 (J)	0.0239 (J)
12/3/2018					<0.1015	<0.1015	<0.1015		
12/4/2018		0.0617 (J)	0.085 (J)						
12/5/2018	0.456			<0.1015				0.0363 (J)	<0.1015
12/18/2018								0.033 (J)	<0.1015
1/3/2019								0.036 (J)	0.0209 (J)
1/24/2019								0.0307 (J)	0.0271 (J)
2/5/2019	0.453			<0.1015	<0.1015			0.0306 (J)	0.0245 (J)
2/6/2019		0.0586 (J)	0.0733 (J)						
2/7/2019						<0.1015	<0.1015		
2/25/2019					<0.1015	<0.1015	<0.1015		
2/26/2019									
2/27/2019	0.457	0.0428 (J)	0.0548 (J)						
2/28/2019				<0.1015				0.0206 (J)	<0.1015
6/18/2019									
6/24/2019									<0.1015
8/19/2019								0.0341 (J)	<0.1015
8/20/2019	0.378			<0.1015	<0.1015				
8/21/2019		0.0569 (J)	0.091 (J)			<0.1015	<0.1015		
8/22/2019									
4/13/2020	0.359				<0.1015				
4/14/2020		0.0474 (J)							
4/15/2020			0.0534 (J)			<0.1015	<0.1015		<0.1015
4/16/2020				<0.1015				0.0331 (J)	
8/24/2020	0.329				<0.1015	<0.1015	<0.1015	0.0303 (J)	
8/25/2020				<0.1015					<0.1015
8/26/2020		0.0501 (J)	0.0665 (J)						
3/16/2021	0.328					<0.1015	<0.1015		
3/17/2021									
3/22/2021				<0.1015				0.0333 (J)	<0.1015
3/23/2021		0.0476 (J)	0.0587 (J)						
3/24/2021					<0.1015				

Prediction Limit

Constituent: Boron (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-14 ...	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
10/5/2021	0.26		0.0673 (J)		<0.1015				
10/6/2021								0.0305 (J)	<0.1015
10/11/2021									
10/12/2021		0.0462 (J)		<0.1015		<0.1015	<0.1015		
5/9/2022	0.261			<0.1015	<0.1015			0.0347 (J)	
5/10/2022			0.0465 (J)			<0.1015	<0.1015		
5/11/2022		0.037 (J)							
5/16/2022									
5/17/2022									<0.1015

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-4
12/6/2017	271	70	42	125	49	128			
12/7/2017							29.8	38.7	30.1
2/6/2018	275			110		130			30.6
2/7/2018		72.4	47.6						
2/8/2018					50		24.3	38.8	
4/23/2018	269					95.9			
4/24/2018		72.3	50.1	88.8	50.5				27.8
4/25/2018							19.8	40.3	
6/26/2018	268						17.8	39.9	26.2
6/27/2018		73.1	37.1	80.8	56.3	99.4			
7/18/2018									
8/6/2018									27.5
8/7/2018	259		37.4	88.5		107	18.3		
8/8/2018		76			65.7			42.3	
9/5/2018									
9/24/2018									
10/22/2018	240		36.3	92.7		107			27.7
10/23/2018		70.2			68.3		18.1	39.8	
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				105			16.6		32.3
12/4/2018	254	74	42.1			120			
12/5/2018					64.3			43.8	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	292			68.6		80.6	14.5		25.5
2/6/2019		73.1	41.3		52.2			34.9	
2/7/2019									
2/25/2019				70.6					
2/26/2019	254		53.3			79.6	16		26.4
2/27/2019		82.2			60.2			42.5	
2/28/2019									
6/18/2019				80.5					
6/24/2019									
8/19/2019									
8/20/2019				74.1		92.3	15.1		23.5
8/21/2019	272							50.9	
8/22/2019		133	38.5		89.4				
4/13/2020				69.5			12.5		
4/14/2020		82.4			40			43.6	
4/15/2020	231		54.1			69.2			22
4/16/2020									
8/24/2020									
8/25/2020	218					80.5			
8/26/2020		111	37.8	75.7	68.4		12.9	43.2	22.8
3/16/2021	218								
3/17/2021							11.3		
3/22/2021				64.9					
3/23/2021		75.9	57		42			38.1	
3/24/2021						61.5			23.1

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-4
10/5/2021	198			65.9	55.8		11.4		27.4
10/6/2021									
10/11/2021			38.2			87.1			
10/12/2021		78.6						35.4	
5/9/2022									
5/10/2022	166		42.2	58.5	48.2		10.8		
5/11/2022								36.9	
5/16/2022						58.2			30.7
5/17/2022		80.6							

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-14 ...	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	48.2	66.1	23.4						
2/6/2018	47.8								
2/7/2018									
2/8/2018		58	20.1						
4/23/2018									
4/24/2018									
4/25/2018	41.8	56.3	17.4						
6/26/2018		57.7	21.8						
6/27/2018	36.9			16.6	39.4	3.89	4.56		
7/18/2018				15.3	38.4	3.8	3.92		
8/6/2018				13.8					
8/7/2018	37.6				36.7				
8/8/2018		51.2	25.4			3.89	3.74		
9/5/2018				12.1	43.6	3.78	3.38		
9/24/2018				11.8	44.5	3.73	3.25		
10/22/2018					45				
10/23/2018	35.3	50.9	25.6			3.79	3.37		
10/24/2018				10.2				28.3	18
11/14/2018								27.5	14.9
11/28/2018								20.7	14.8
12/3/2018					33.7	3.79	3.67		
12/4/2018		51.9	19						
12/5/2018	36.3			9.14				25.3	14.8
12/18/2018								20.9	16.4
1/3/2019								18.5	19.7
1/24/2019								17	19.6
2/5/2019	36.6			15.1	30.1			17.1	20.8
2/6/2019		55	16.4						
2/7/2019						3.75	2.89		
2/25/2019					25.6	3.81	2.95		
2/26/2019									
2/27/2019	39.6	53.4	15.6						
2/28/2019				21.4				18.6	21.5
6/18/2019									
6/24/2019									18.4
8/19/2019								25.3	12.8
8/20/2019	33.7			14.4	38.3				
8/21/2019		71.5	23.5			3.71	3.04		
8/22/2019									
4/13/2020	43				25.9				
4/14/2020		56.2							
4/15/2020			14			3.56	2.93		13.1
4/16/2020				20.1				30.7	
8/24/2020	35.5				29	3.45	2.94	30.8	
8/25/2020				13.1					12.2
8/26/2020		55.5	16.7						
3/16/2021	38.1					3.44	2.9		
3/17/2021									
3/22/2021				12.2				31	18.4
3/23/2021		48.9	12.5						
3/24/2021					22.2				

Prediction Limit

Constituent: Calcium (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-8	GSD-AP-MW-7	GSD-AP-MW-14 ...	GSD-AP-PZ-1	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
10/5/2021	36		15.9		25.4				
10/6/2021								31	13.4
10/11/2021									
10/12/2021		66.3		11.8		3.29	2.94		
5/9/2022	38.4			14.5	18.9			28.4	
5/10/2022			9.95			3.24	2.87		
5/11/2022		61.9							
5/16/2022									
5/17/2022									19.7

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-7
12/6/2017	6.2	6.3	6.9	7.6	6.2	4.1			
12/7/2017							10	7	7.9
2/6/2018	5.9			7.6		3.1			
2/7/2018		5.4	6.1						
2/8/2018					6.1		9.5		6.7
2/12/2018								6.6	
4/23/2018	5.9					3.7			
4/24/2018		5.7	6.9	7.5	5.9				
4/25/2018							9.1	7.1	7
6/26/2018	5.7						9.5	6.4	7.4
6/27/2018		5.4	5.6	7.3	5.5	2.2			
7/18/2018									
8/6/2018									
8/7/2018	5.3		5.1	7.6		2.6	9		
8/8/2018		5.2			5.3			5.5	7.7
9/5/2018									
9/24/2018									
10/22/2018	5.6		5.5	6.9		2.8			
10/23/2018		5.4			5.8		9.9	6.7	8
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				6.8			8.7		
12/4/2018	5.8	5.3	5.6			4.1			6.7
12/5/2018					6			5.9	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	5.8			6.95		2.56	8.73		
2/6/2019		5.89	6.24		5.95			7.26	6.84
2/7/2019									
2/25/2019				6.55					
2/26/2019	5.92		8.28			3.03	8.66		
2/27/2019		6.2			5.88			6.77	6.21
2/28/2019									
6/18/2019				6.62					
6/24/2019									
8/19/2019									
8/20/2019				6.07		2.24	9.55		
8/21/2019	5.26							6.16	7.35
8/22/2019		4.64	5.66		6.31				
4/13/2020				5.95			8.6		
4/14/2020		5.46			5.74			7.27	
4/15/2020	5.5		6.49			2.16			4.99
4/16/2020									
8/24/2020									
8/25/2020	5.59					2			
8/26/2020		4.74	5.39	5.89	5.91		9.21	6.57	6.19
3/16/2021	6.2								
3/17/2021							8.59		
3/22/2021				5.26					
3/23/2021		5.54	7.14		6.3			7.42	4.87

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-7
3/24/2021						2.29			
10/5/2021	6.1			5.09	6.26		9.09		6.43
10/6/2021									
10/11/2021			5.72			2.43			
10/12/2021		5.8						7.78	
5/9/2022									
5/10/2022	5.97		5.72	4.59	5.64		8.87		3.96
5/11/2022								7.2	
5/16/2022						2.18			
5/17/2022		5.92							

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-PZ-1	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	5.2	8.5	8.7						
2/6/2018		8.8	8.5						
2/7/2018									
2/8/2018	4.1								
2/12/2018									
4/23/2018									
4/24/2018		8.4							
4/25/2018	5.3		7.6						
6/26/2018	5	8.7							
6/27/2018			7.1	3.1	4.1	4.2	3.6		
7/18/2018				3.4	4.3	4.1	3.8		
8/6/2018		11		2.8					
8/7/2018			6.9				3.3		
8/8/2018	4.8				3.8	3.3			
9/5/2018				2.8	3.9	3.7	3.4		
9/24/2018				3.1	4.2	3.9	3.8		
10/22/2018		8.6					3.3		
10/23/2018	4.4		6.7		4.1	4			
10/24/2018				2.8				4	3.3
11/14/2018								3.6	3.6
11/28/2018								3.5	3.5
12/3/2018		9.1			3.8	3.6	3.2		
12/4/2018	4.2								
12/5/2018			6.7	2.2				3.2	3.3
12/18/2018								3.4	3.6
1/3/2019								3.2	3.4
1/24/2019								3.15	3.91
2/5/2019		9.81	7.24	3.12			3.78	2.98	3.94
2/6/2019	5.84								
2/7/2019					4.15	3.72			
2/25/2019					4.2	3.95	3.66		
2/26/2019		13							
2/27/2019	6.52		7.38						
2/28/2019				3.45				3.05	4.15
6/18/2019									
6/24/2019									3.36 (D)
8/19/2019								2.8	3.42
8/20/2019		9.62	6.53	3.27			3.52		
8/21/2019	5.89				4	3.85			
8/22/2019									
4/13/2020			6.48				3.36		
4/14/2020	5.21								
4/15/2020		9.27			3.71	3.83			3.39
4/16/2020				3.74				2.93	
8/24/2020			6.64		3.59	3.96	3.35	2.82	
8/25/2020				3.03					2.94
8/26/2020	5.16	8.96							
3/16/2021			7.14		3.66	3.98			
3/17/2021									
3/22/2021				3.15				2.94	3.61
3/23/2021	5.3								

Prediction Limit

Constituent: Chloride (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-PZ-1	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
3/24/2021		8.61					3.45		
10/5/2021		9.3	6.78				3.23		
10/6/2021								2.98	3.17
10/11/2021									
10/12/2021	5.6			2.87	3.68	4.07			
5/9/2022			6.81	3			3.46	3.01	
5/10/2022					3.68	4.12			
5/11/2022	5.13								
5/16/2022		8.07							
5/17/2022									3.58

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-7
12/6/2017	650	83	11	250	200	210			
12/7/2017							10	9	14
2/6/2018	560			230		190			
2/7/2018		84	19						
2/8/2018					200		11		10
2/12/2018								8.3	
4/23/2018	640					140			
4/24/2018		98	27	260	210				
4/25/2018							13	12	11
6/26/2018	670						11	8.5	11
6/27/2018		95	<1	230	240	130			
7/18/2018									
8/6/2018									
8/7/2018	660		<1	200		150	12		
8/8/2018		110			260			6.7	13
9/5/2018									
9/24/2018									
10/22/2018	580		<1	190		160			
10/23/2018		78			280		11	9.4	13
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				200			12		
12/4/2018	580	97	11			170			9.8
12/5/2018					280			7.8	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	702			263		145	13.9		
2/6/2019		113	16.8		239			17	10.8
2/7/2019									
2/25/2019				246					
2/26/2019	748		38.4			148	14.1		
2/27/2019		135			257			12.4	8.98
2/28/2019									
6/18/2019				245					
6/24/2019									
8/19/2019									
8/20/2019				222		110	12.3		
8/21/2019	708							11.3	11.8
8/22/2019		305	6.74		339				
4/13/2020				256			13.9		
4/14/2020		146			155			15.9	
4/15/2020	647		50.7			116			7.95
4/16/2020									
8/24/2020									
8/25/2020	642					114			
8/26/2020		280	10.5	246	282		13.1	12.9	9.19
3/16/2021	593								
3/17/2021							13.7		
3/22/2021				254					
3/23/2021		135	60.1		160			15.7	8.08

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-7
3/24/2021						101			
10/5/2021	567			228	195		14.2		9.19
10/6/2021									
10/11/2021			7.75			112			
10/12/2021		142						18	
5/9/2022									
5/10/2022	508		11.6	215	193		14.8		7.13
5/11/2022								17.7	
5/16/2022						93.1			
5/17/2022		145							

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-PZ-1	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	6.5	<1	19						
2/6/2018		<1	20						
2/7/2018									
2/8/2018	8.9								
2/12/2018									
4/23/2018									
4/24/2018		<1							
4/25/2018	7.9		22						
6/26/2018	7.5	<1							
6/27/2018			18	120	<1	<1	2.2 (J)		
7/18/2018				120	<1	<1	2.5 (J)		
8/6/2018		<1		110					
8/7/2018			20				<1		
8/8/2018	7.3				<1	<1			
9/5/2018				86	<1	<1	1.4 (J)		
9/24/2018				80	<1	<1	<1		
10/22/2018		<1					1.7 (J)		
10/23/2018	7.8		18		<1	<1			
10/24/2018				68				16	44
11/14/2018								13	44
11/28/2018								11	46
12/3/2018		<1			<1	<1	2.1 (J)		
12/4/2018	8.2								
12/5/2018			20	54				12	51
12/18/2018								11	76
1/3/2019								10	94
1/24/2019								10.2	135
2/5/2019		5.38	24.3	126			3.99	10.4	183
2/6/2019	9.53								
2/7/2019					1.69	0.639 (J)			
2/25/2019					1.53	<1	4.01		
2/26/2019		5.1							
2/27/2019	8.25		24.7						
2/28/2019				207				9.86	192
6/18/2019									
6/24/2019									129 (D)
8/19/2019								8.74	66.6
8/20/2019		7.34	21.3	106			3.73		
8/21/2019	10.8				1.62	1.21			
8/22/2019									
4/13/2020			21.9				3.83		
4/14/2020	12.5								
4/15/2020		17.2			1.68	0.554 (J)			92.8
4/16/2020				191				11.5	
8/24/2020			21.2		1.31	<1	4.16	10	
8/25/2020				98.4					74.1
8/26/2020	16.1	15.5							
3/16/2021			18.8		1.7	1.02			
3/17/2021									
3/22/2021				83.8				10.6	128
3/23/2021	9.21								

Prediction Limit

Constituent: Sulfate (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-PZ-1	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
3/24/2021		19.9					2.88		
10/5/2021		37.8	14.4				2.17		
10/6/2021								10.2	93.5
10/11/2021									
10/12/2021	16			95.7	1.34	0.895 (J)			
5/9/2022			15.5	125			2.51	10	
5/10/2022					1.28 (J)	1.02 (J)			
5/11/2022	11.8								
5/16/2022		51.8							
5/17/2022									139

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-7
12/6/2017	1300	312	215	628	371	574			
12/7/2017							136	183	137
2/6/2018	1310			556		572			
2/7/2018		323	237						
2/8/2018					367		122		124
2/12/2018								201	
4/23/2018	1210					414			
4/24/2018		324	242	510	365				
4/25/2018							102	180	106
6/26/2018	1250						106	191	129
6/27/2018		333	194	486	421	440			
7/18/2018									
8/6/2018									
8/7/2018	1220		195	487		485	71.3		
8/8/2018		346			479			192	142
9/5/2018									
9/24/2018									
10/22/2018	1150		184	450		484			
10/23/2018		311			507		105	185	142
10/24/2018									
11/14/2018									
11/28/2018									
12/3/2018				492			102		
12/4/2018	1090	343	215			504			121
12/5/2018					479			200	
12/18/2018									
1/3/2019									
1/24/2019									
2/5/2019	1200			428		366	107		
2/6/2019		317	208		399			151	108
2/7/2019									
2/25/2019				441					
2/26/2019	1210		252			372	99.3		
2/27/2019		360			422			186	103
2/28/2019									
6/18/2019				422					
6/24/2019									
8/19/2019									
8/20/2019				416		369	98.7		
8/21/2019	1200							200	133
8/22/2019		555	194		501				
4/13/2020				433			90.7		
4/14/2020		372			278			187	
4/15/2020	1060		262			300			102
4/16/2020									
8/24/2020									
8/25/2020	1060					339			
8/26/2020		517	186	455	472		91.3	192	109
3/16/2021	1040								
3/17/2021							80		
3/22/2021				427					
3/23/2021		361	273		286			178	92.7

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-11	GSD-AP-MW-10	GSD-AP-MW-3	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-6	GSD-AP-MW-9	GSD-AP-MW-7
3/24/2021						287			
10/5/2021	964			389	378		96.7		113
10/6/2021									
10/11/2021			190			337			
10/12/2021		352						169	
5/9/2022									
5/10/2022	780		199	362	319		73.3		82.7
5/11/2022								181	
5/16/2022						244			
5/17/2022		367							

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-PZ-1	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
12/6/2017									
12/7/2017	253	189	215						
2/6/2018		206	204						
2/7/2018									
2/8/2018	229								
2/12/2018									
4/23/2018									
4/24/2018		193							
4/25/2018	223		192						
6/26/2018	232	180							
6/27/2018			180	219	44	48.7	144		
7/18/2018				195	42.7	46	156		
8/6/2018		182		175					
8/7/2018			183				140		
8/8/2018	208				46	48			
9/5/2018				153	67.3	47.3	154		
9/24/2018				127	49.3	44.7	165		
10/22/2018		204					148		
10/23/2018	209		169		31.3	35.3			
10/24/2018				125				184	107
11/14/2018								170	96.7
11/28/2018								167	102
12/3/2018		168			46	48.7	127		
12/4/2018	213								
12/5/2018			177	101				185	103
12/18/2018								164	126
1/3/2019								167	191
1/24/2019								137	212
2/5/2019		158	198	180			113	138	269
2/6/2019	212								
2/7/2019					32.7	42.7			
2/25/2019					31.3	40.7	106		
2/26/2019		191							
2/27/2019	211		185						
2/28/2019				287				140	261
6/18/2019									
6/24/2019									203.5 (D)
8/19/2019								240	121
8/20/2019		164	174	265			141		
8/21/2019	226				42.7	46			
8/22/2019									
4/13/2020			192				104		
4/14/2020	222								
4/15/2020		170			37.3	41.3			155
4/16/2020				280				166	
8/24/2020			175		37.3	42.7	114	162	
8/25/2020				160					131
8/26/2020	215	168							
3/16/2021			184		41.3	42			
3/17/2021									
3/22/2021				126				157	204
3/23/2021	200								

Prediction Limit

Constituent: Total Dissolved Solids (mg/L) Analysis Run 7/18/2022 1:48 PM View: Appendix III - Interwell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-14 ...	GSD-AP-PZ-6	GSD-AP-PZ-5	GSD-AP-PZ-1	GSD-AP-MW-17 ...	GSD-AP-MW-16 ...
3/24/2021		180					94		
10/5/2021		200	168				108		
10/6/2021								182	136
10/11/2021									
10/12/2021	245			142	35.3	38.7			
5/9/2022			174	185			85.3	152	
5/10/2022					33.3	33.3			
5/11/2022	216								
5/16/2022		218							
5/17/2022									226

FIGURE E.

Intrawell Prediction Limits - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**5/10/2022**	**4.78**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-2**	**6.801**	**6.273**	**5/16/2022**	**6.16**	**Yes**	**13**	**6.537**	**0.09742**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**5/9/2022**	**5.43**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	**GSD-AP-MW-7**	**6.847**	**5.694**	**5/10/2022**	**5.08**	**Yes**	**13**	**6.271**	**0.2126**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**

Intrawell Prediction Limits - All Results

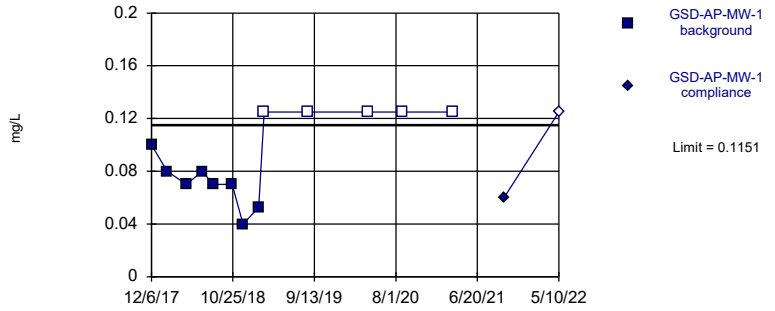
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:43 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GSD-AP-MW-1	0.1151	n/a	5/10/2022	0.125ND	No	13	0.06075	0.02003	38.46	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-10	0.1381	n/a	5/10/2022	0.0918J	No	13	0.08731	0.01872	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-11	0.1122	n/a	5/17/2022	0.125ND	No	13	0.0646	0.01756	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-12	0.125	n/a	5/10/2022	0.125ND	No	13	n/a	n/a	92.31	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-MW-14	0.2947	n/a	5/9/2022	0.125ND	No	13	0.1209	0.06411	46.15	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-16	0.1599	n/a	5/17/2022	0.125ND	No	14	0.1026	0.02163	50	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-17	0.2376	n/a	5/9/2022	0.191	No	13	0.1837	0.01989	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-2	0.3534	n/a	5/16/2022	0.264	No	13	0.2362	0.04323	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-3	0.1327	n/a	5/10/2022	0.0714J	No	14	0.07516	0.0217	28.57	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-4	0.2837	n/a	5/16/2022	0.17	No	13	0.2314	0.01931	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-5	0.08126	n/a	5/9/2022	0.0682J	No	13	0.05878	0.008293	0	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-6	0.09393	n/a	5/10/2022	0.125ND	No	13	0.3704	0.03104	38.46	Kaplan-Meier	x^(1/3)	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-7	0.109	n/a	5/10/2022	0.0627J	No	13	0.0755	0.01236	23.08	Kaplan-Meier	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-8	0.149	n/a	5/11/2022	0.0695J	No	13	0.09544	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-MW-9	0.1665	n/a	5/11/2022	0.108J	No	13	0.01415	0.005005	7.692	None	x^2	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-1	0.1606	n/a	5/9/2022	0.0824J	No	13	0.1071	0.01975	7.692	None	No	0.0005016	Param Intra 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	n/a	5/10/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	n/a	5/10/2022	0.125ND	No	13	n/a	n/a	53.85	n/a	n/a	0.009692	NP Intra (NDs) 1 of 2
pH (pH)	GSD-AP-MW-1	6.84	5.503	5/10/2022	5.77	No	13	6.172	0.2466	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-10	7.042	6.384	5/10/2022	6.39	No	13	2060	147.3	0	None	x^4	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-11	7.012	6.206	5/17/2022	6.44	No	13	6.609	0.1486	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-12**	**5.692**	**5.209**	**5/10/2022**	**4.78**	**Yes**	**13**	**5.451**	**0.08911**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-14	4.1	3.25	5/9/2022	3.6	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-MW-16	5.683	3.348	5/17/2022	4.34	No	13	4.515	0.4307	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-17	10.35	6.943	5/9/2022	7.29	No	13	8.645	0.6277	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-2**	**6.801**	**6.273**	**5/16/2022**	**6.16**	**Yes**	**13**	**6.537**	**0.09742**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-3	6.88	5.224	5/10/2022	5.95	No	13	6.052	0.3053	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-4	6.998	6.332	5/16/2022	6.61	No	13	6.665	0.1229	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-5**	**6.352**	**5.982**	**5/9/2022**	**5.43**	**Yes**	**13**	**6.167**	**0.06836**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-6	6.703	5.385	5/10/2022	5.51	No	13	6.044	0.243	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	**GSD-AP-MW-7**	**6.847**	**5.694**	**5/10/2022**	**5.08**	**Yes**	**13**	**6.271**	**0.2126**	**0**	**None**	**No**	**0.0002508**	**Param Intra 1 of 2**
pH (pH)	GSD-AP-MW-8	7.032	6.084	5/11/2022	6.25	No	13	6.558	0.1748	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-MW-9	7.152	6.581	5/11/2022	6.7	No	14	6.866	0.1077	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-1	6.83	5.85	5/9/2022	6.03	No	13	n/a	n/a	0	n/a	n/a	0.01938	NP Intra (normality) 1 of 2
pH (pH)	GSD-AP-PZ-5	6.328	4.632	5/10/2022	5.38	No	13	5.48	0.3127	0	None	No	0.0002508	Param Intra 1 of 2
pH (pH)	GSD-AP-PZ-6	5.699	5.348	5/10/2022	5.57	No	13	5.523	0.06473	0	None	No	0.0002508	Param Intra 1 of 2

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.06075, Std. Dev.=0.02003, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8592, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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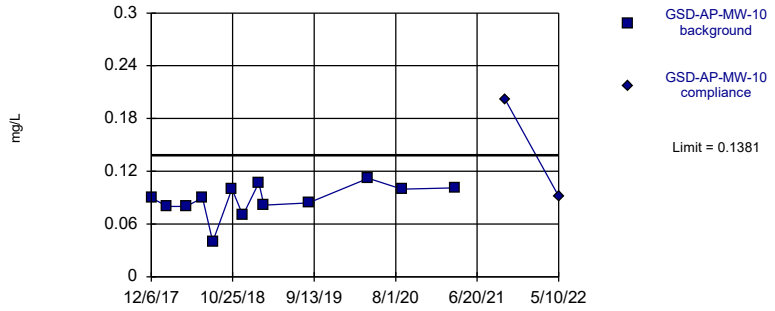
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.08731, Std. Dev.=0.01872, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9056, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

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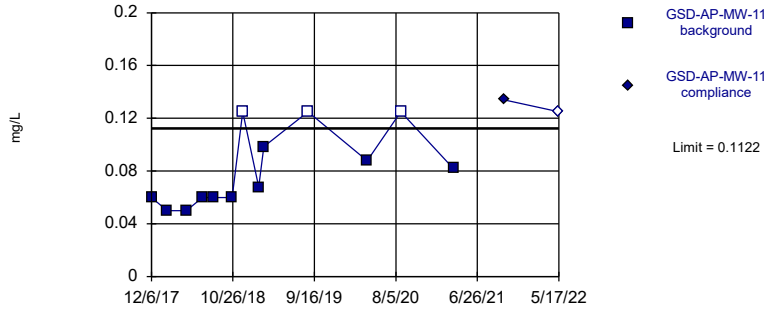
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



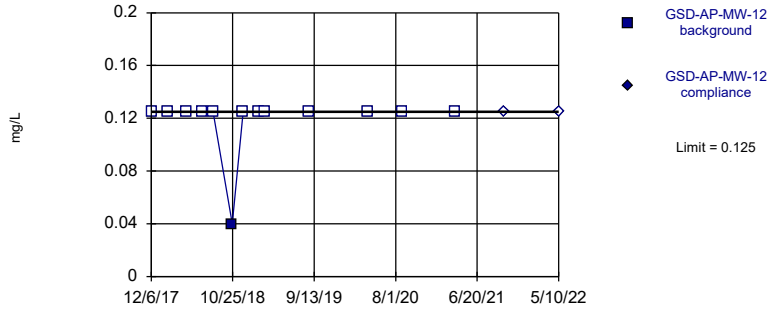
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0646, Std. Dev.=0.01756, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8376, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 92.31% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

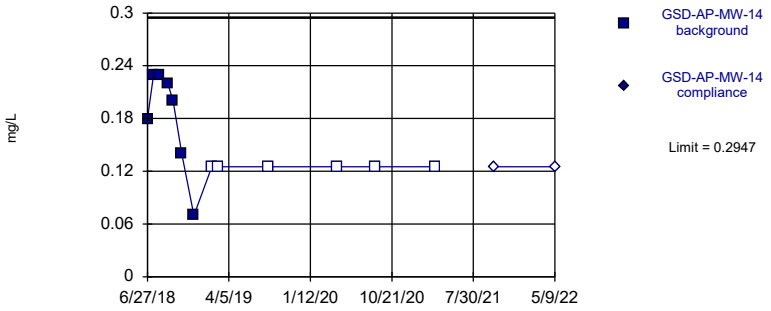
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1209, Std. Dev.=0.06411, n=13, 46.15% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8602, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

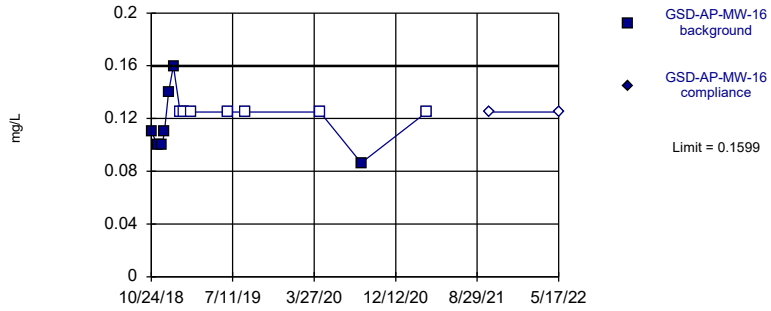
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.1026, Std. Dev.=0.02163, n=14, 50% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9116, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

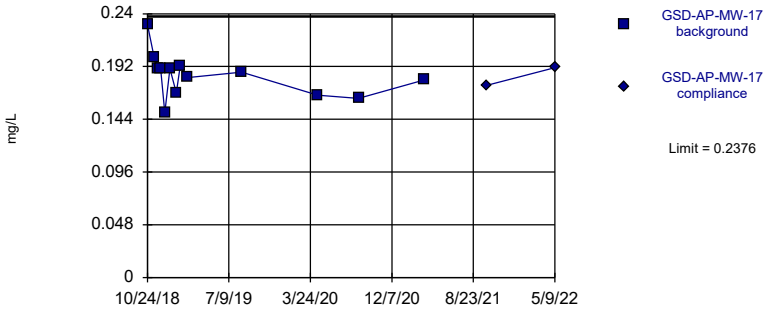
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.1837, Std. Dev.=0.01989, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9377, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

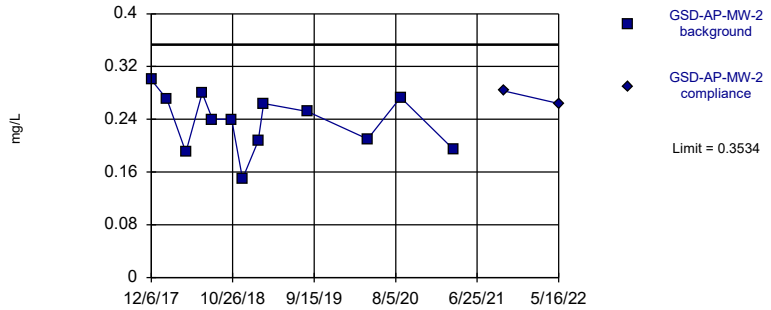
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2362, Std. Dev.=0.04323, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9598, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

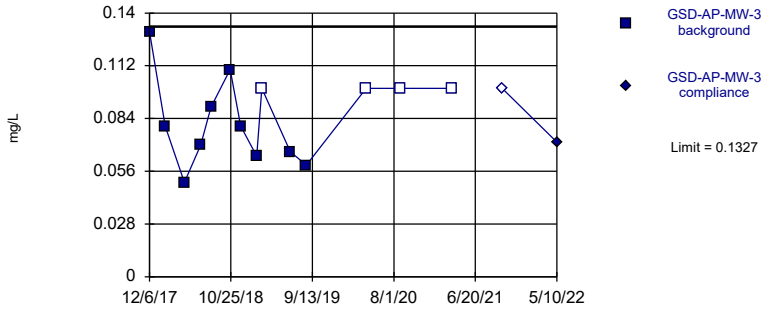
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.07516, Std. Dev.=0.0217, n=14, 28.57% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9616, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

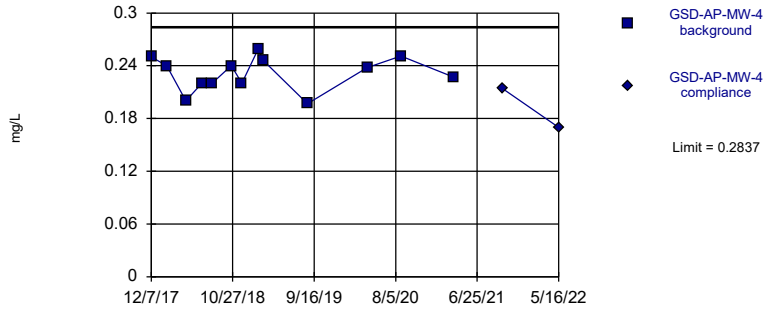
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.2314, Std. Dev.=0.01931, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.937, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

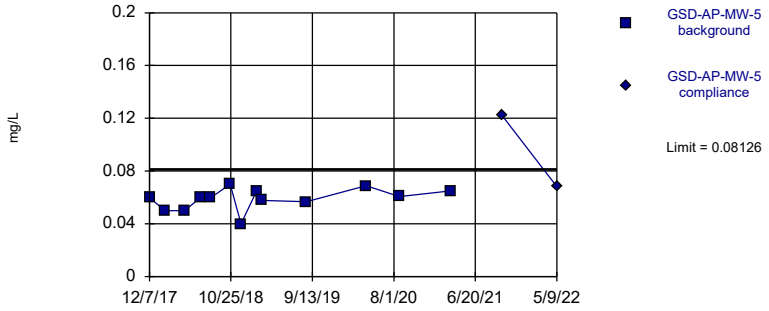
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.05878, Std. Dev.=0.008293, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9302, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

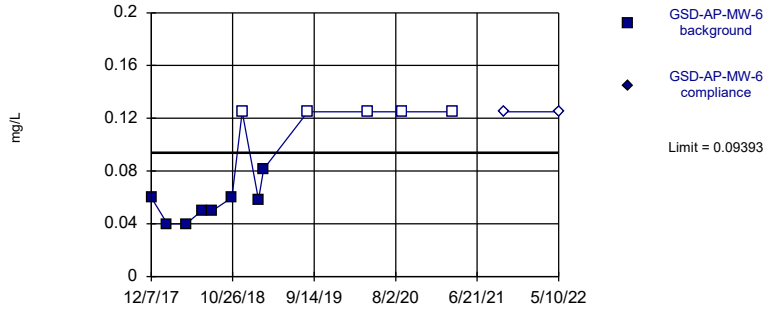
Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.

Within Limit

Prediction Limit

Intrawell Parametric



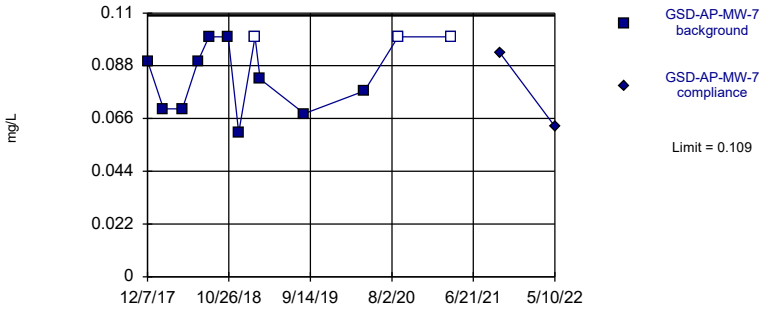
Background Data Summary (based on cube root transformation) (after Kaplan-Meier Adjustment): Mean=0.3704, Std. Dev.=0.03104, n=13, 38.46% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8158, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



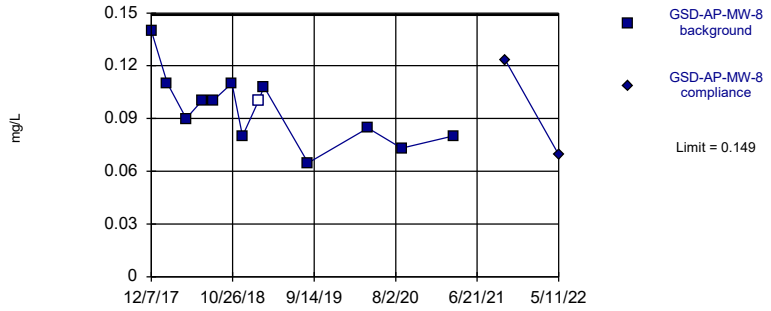
Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.0755, Std. Dev.=0.01236, n=13, 23.08% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8606, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



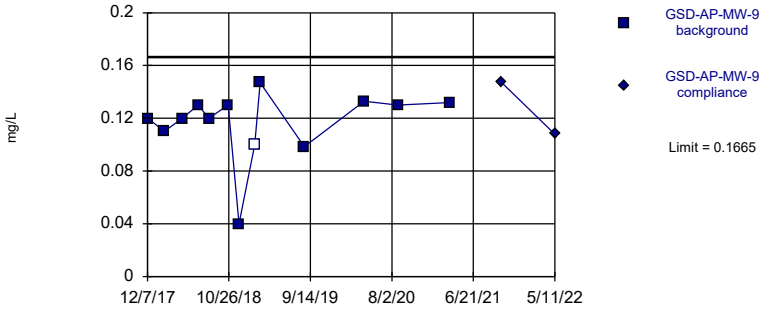
Background Data Summary: Mean=0.09544, Std. Dev.=0.01975, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9517, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



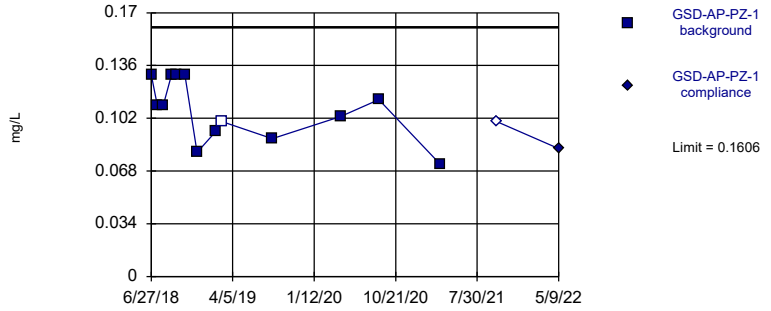
Background Data Summary (based on square transformation): Mean=0.01415, Std. Dev.=0.005005, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8951, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Parametric



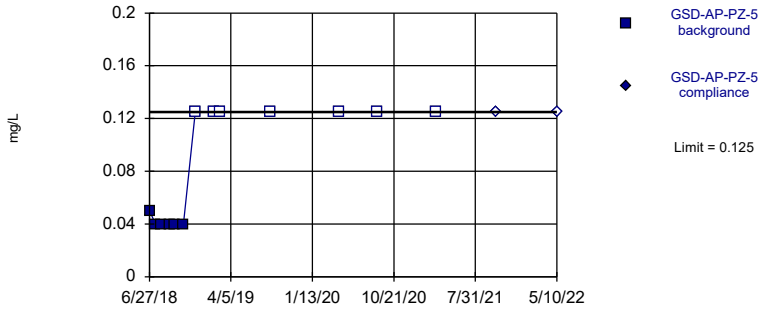
Background Data Summary: Mean=0.1071, Std. Dev.=0.01975, n=13, 7.692% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9172, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



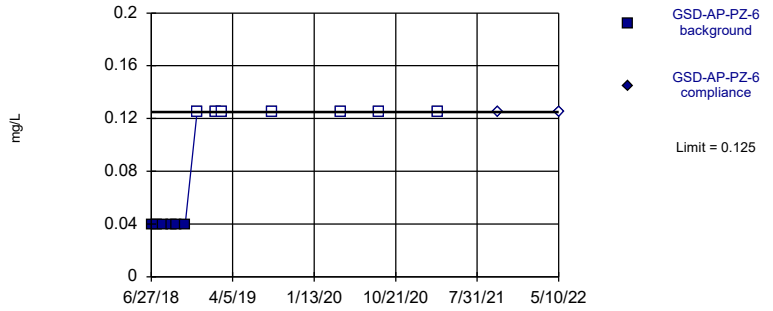
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Hollow symbols indicate censored values.
Within Limit

Prediction Limit

Intrawell Non-parametric



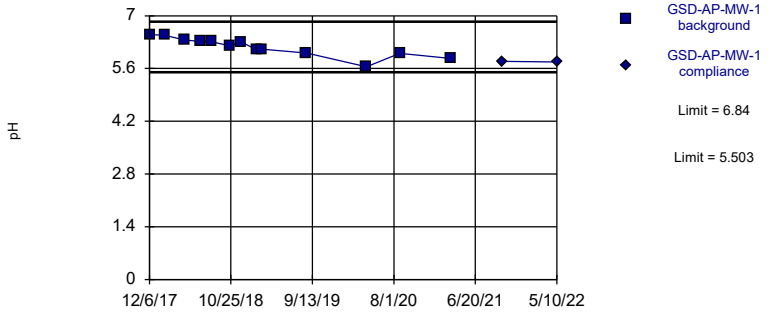
Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 13 background values. 53.85% NDs. Well-constituent pair annual alpha = 0.01929. Individual comparison alpha = 0.009692 (1 of 2).

Constituent: Fluoride Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Within Limits

Prediction Limit

Intrawell Parametric



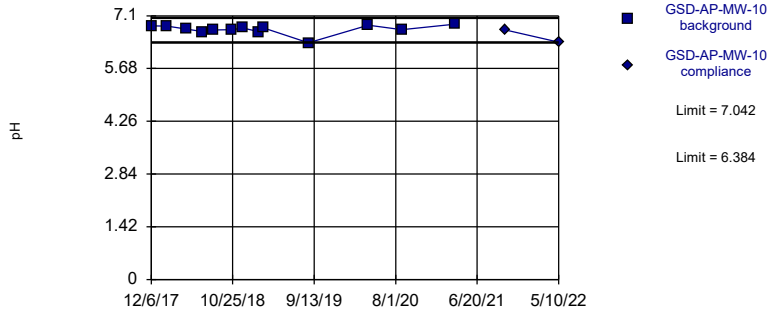
Background Data Summary: Mean=6.172, Std. Dev.=0.2466, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9507, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^4 transformation): Mean=2060, Std. Dev.=147.3, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8204, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

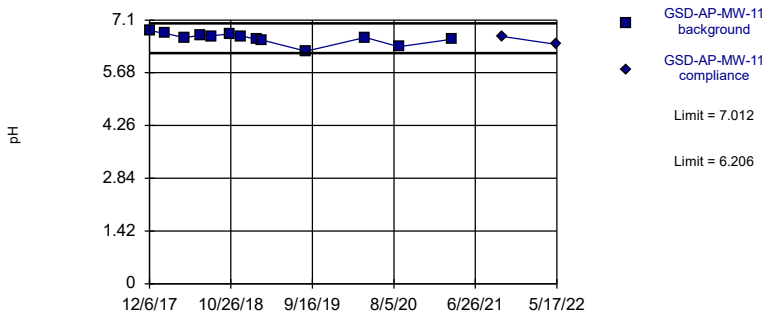
Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.609, Std. Dev.=0.1486, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

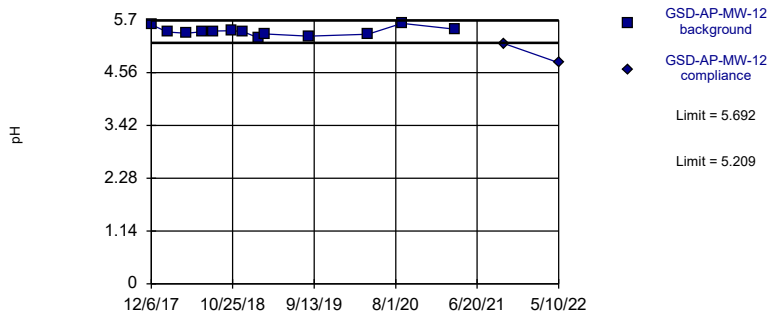
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.451, Std. Dev.=0.08911, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.939, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

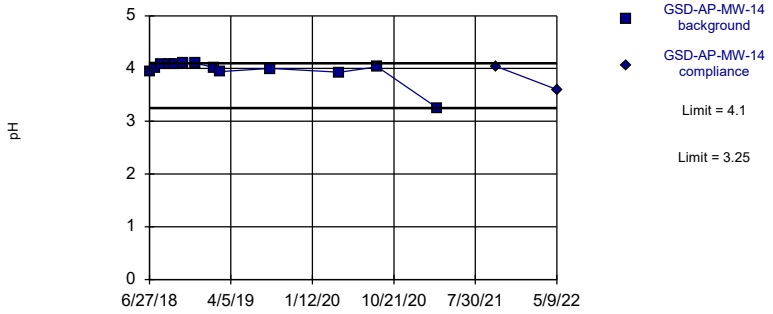
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

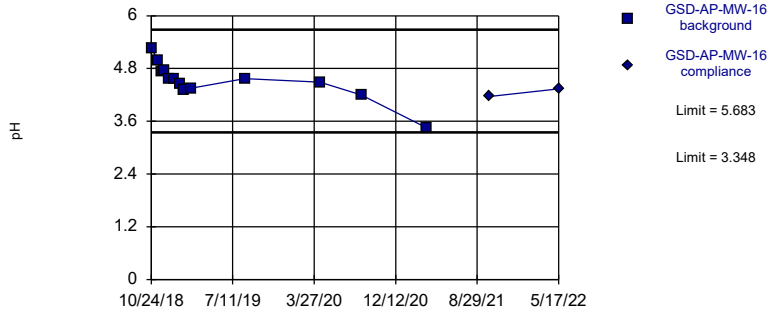
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=4.515, Std. Dev.=0.4307, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9225, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

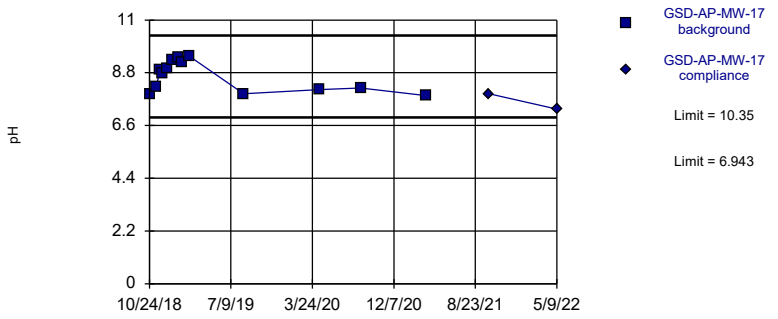
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=8.645, Std. Dev.=0.6277, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8772, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

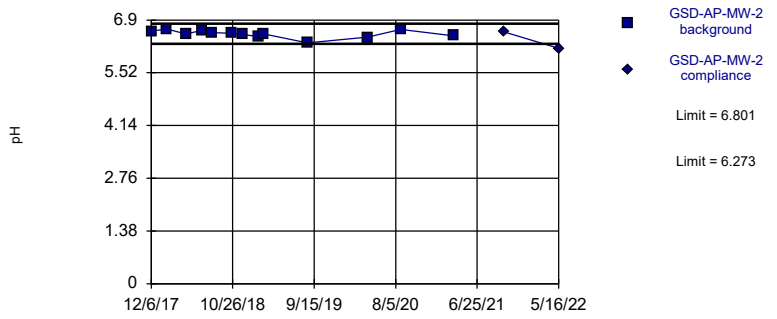
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.537, Std. Dev.=0.09742, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9249, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

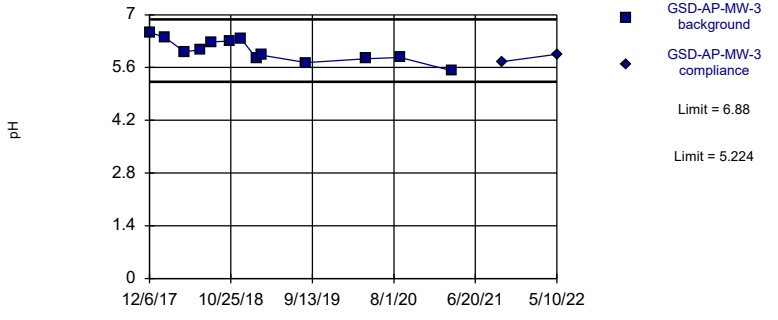
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.052, Std. Dev.=0.3053, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.961, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

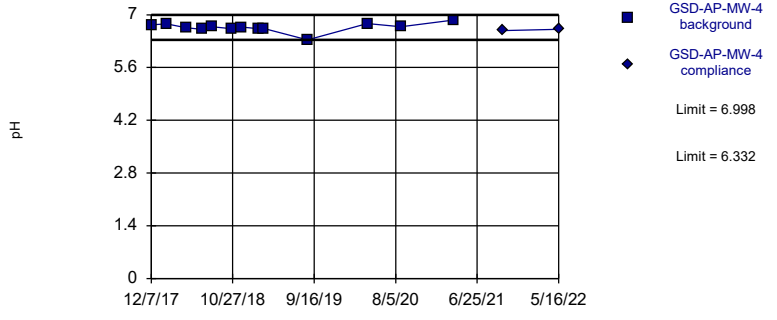
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.665, Std. Dev.=0.1229, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8446, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

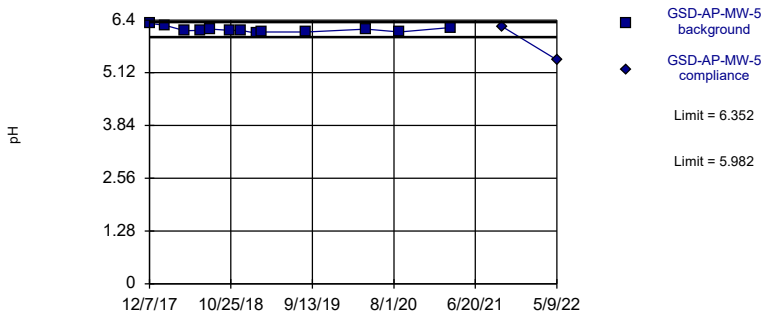
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.167, Std. Dev.=0.06836, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9003, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

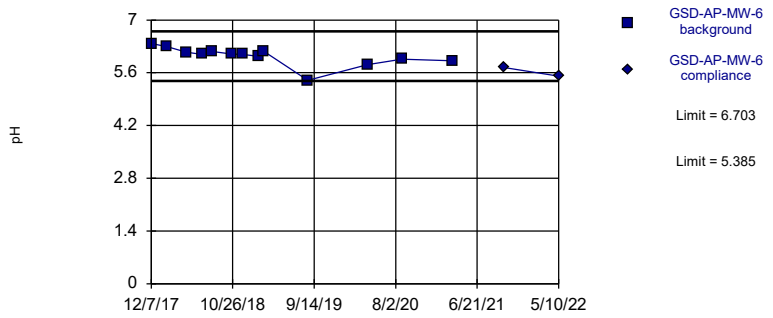
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.044, Std. Dev.=0.243, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8773, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

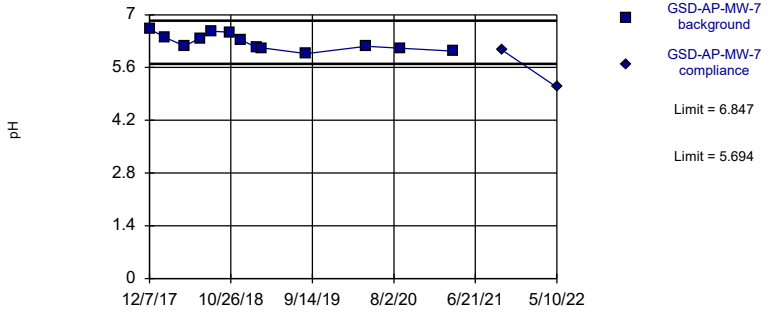
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.271, Std. Dev.=0.2126, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9235, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

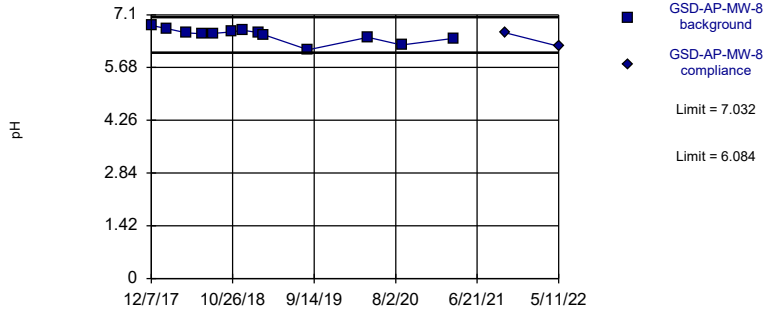
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.558, Std. Dev.=0.1748, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.913, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

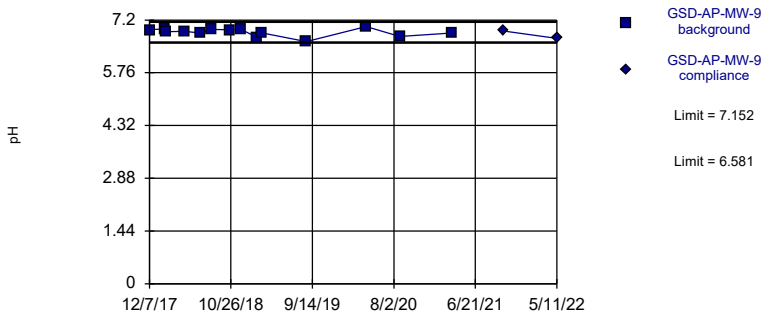
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.866, Std. Dev.=0.1077, n=14. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9109, critical = 0.825. Kappa = 2.651 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

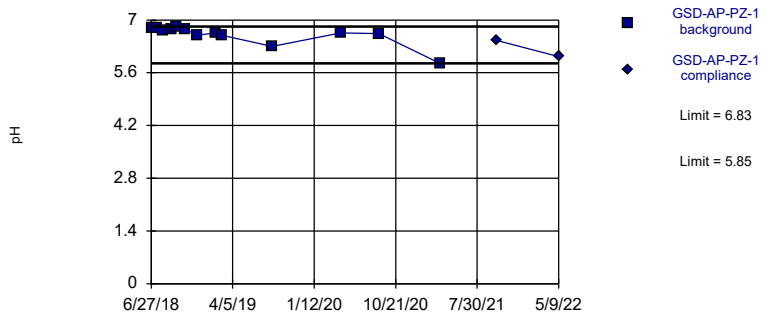
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 13 background values. Well-constituent pair annual alpha = 0.03858. Individual comparison alpha = 0.01938 (1 of 2).

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

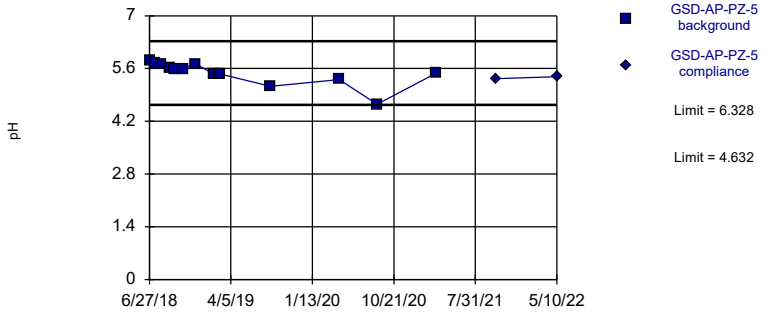
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.48, Std. Dev.=0.3127, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8416, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

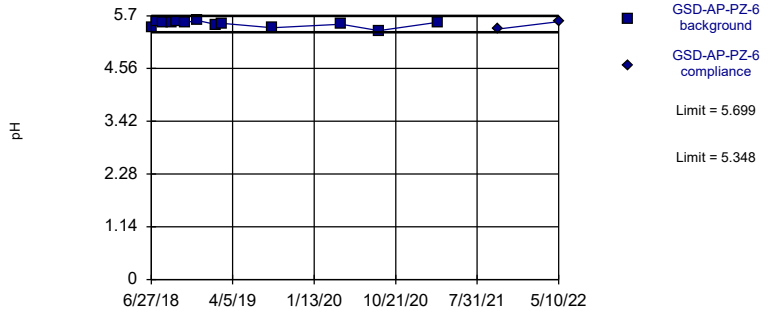
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.523, Std. Dev.=0.06473, n=13. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8711, critical = 0.814. Kappa = 2.711 (c=7, w=15, 1 of 2, event alpha = 0.05132). Report alpha = 0.0005016.

Constituent: pH Analysis Run 7/18/2022 1:42 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	0.1	
2/6/2018	0.08 (J)	
4/23/2018	0.07 (J)	
6/26/2018	0.08 (J)	
8/7/2018	0.07 (J)	
10/22/2018	0.07 (J)	
12/4/2018	0.04 (J)	
2/5/2019	0.0525 (J)	
2/26/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/25/2020	<0.125	
3/16/2021	<0.125	
10/5/2021		0.0601 (J)
5/10/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	0.09 (J)	
2/7/2018	0.08 (J)	
4/24/2018	0.08 (J)	
6/27/2018	0.09 (J)	
8/7/2018	0.04 (J)	
10/22/2018	0.1	
12/4/2018	0.07 (J)	
2/6/2019	0.107	
2/26/2019	0.0813 (J)	
8/22/2019	0.084 (J)	
4/15/2020	0.112	
8/26/2020	0.0997 (J)	
3/23/2021	0.101	
10/11/2021		0.201
5/10/2022		0.0918 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	0.06 (J)	
2/7/2018	0.05 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/8/2018	0.06 (J)	
10/23/2018	0.06 (J)	
12/4/2018	<0.125	
2/6/2019	0.0678 (J)	
2/27/2019	0.0985 (J)	
8/22/2019	<0.125	
4/14/2020	0.0878 (J)	
8/26/2020	<0.125	
3/23/2021	0.0819 (J)	
10/12/2021		0.134
5/17/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	<0.125	
2/8/2018	<0.125	
4/24/2018	<0.125	
6/27/2018	<0.125	
8/8/2018	<0.125	
10/23/2018	0.04 (J)	
12/5/2018	<0.125	
2/6/2019	<0.125	
2/27/2019	<0.125	
8/22/2019	<0.125	
4/14/2020	<0.125	
8/26/2020	<0.125	
3/23/2021	<0.125	
10/5/2021		<0.125
5/10/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	0.18	
7/18/2018	0.23	
8/6/2018	0.23	
9/5/2018	0.22	
9/24/2018	0.2	
10/24/2018	0.14	
12/5/2018	0.07 (J)	
2/5/2019	<0.125	
2/28/2019	<0.125	
8/20/2019	<0.125	
4/16/2020	<0.125	
8/25/2020	<0.125	
3/22/2021	<0.125	
10/12/2021		<0.125
5/9/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	0.11	
11/14/2018	0.1	
11/28/2018	0.1	
12/5/2018	0.11	
12/18/2018	0.14	
1/3/2019	0.16	
1/24/2019	<0.125	
2/5/2019	<0.125	
2/28/2019	<0.125	
6/24/2019	<0.125 (D)	
8/19/2019	<0.125	
4/15/2020	<0.125	
8/25/2020	0.0863 (J)	
3/22/2021	<0.125	
10/6/2021		<0.125
5/17/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	0.23	
11/14/2018	0.2	
11/28/2018	0.19	
12/5/2018	0.19	
12/18/2018	0.15	
1/3/2019	0.19	
1/24/2019	0.168	
2/5/2019	0.192	
2/28/2019	0.182	
8/19/2019	0.187	
4/16/2020	0.166	
8/24/2020	0.163	
3/22/2021	0.18	
10/6/2021		0.175
5/9/2022		0.191

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	0.3	
2/6/2018	0.27	
4/23/2018	0.19	
6/27/2018	0.28	
8/7/2018	0.24	
10/22/2018	0.24	
12/4/2018	0.15	
2/5/2019	0.207	
2/26/2019	0.264	
8/20/2019	0.252	
4/15/2020	0.21	
8/25/2020	0.273	
3/24/2021	0.194	
10/11/2021		0.283
5/16/2022		0.264

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	0.13	
2/6/2018	0.08 (J)	
4/24/2018	0.05 (J)	
6/27/2018	0.07 (J)	
8/7/2018	0.09 (J)	
10/22/2018	0.11	
12/3/2018	0.08 (J)	
2/5/2019	0.064 (J)	
2/25/2019	<0.1	
6/18/2019	0.0664 (J)	
8/20/2019	0.0592 (J)	
4/13/2020	<0.1	
8/26/2020	<0.1	
3/22/2021	<0.1	
10/5/2021		<0.1
5/10/2022		0.0714 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	0.25	
2/6/2018	0.24	
4/24/2018	0.2	
6/26/2018	0.22	
8/6/2018	0.22	
10/22/2018	0.24	
12/3/2018	0.22	
2/5/2019	0.259	
2/26/2019	0.246	
8/20/2019	0.197	
4/15/2020	0.238	
8/26/2020	0.251	
3/24/2021	0.227	
10/5/2021		0.214
5/16/2022		0.17

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	0.06 (J)	
2/6/2018	0.05 (J)	
4/25/2018	0.05 (J)	
6/27/2018	0.06 (J)	
8/7/2018	0.06 (J)	
10/23/2018	0.07 (J)	
12/5/2018	0.04 (J)	
2/5/2019	0.0651 (J)	
2/27/2019	0.0578 (J)	
8/20/2019	0.0567 (J)	
4/13/2020	0.0688 (J)	
8/24/2020	0.0607 (J)	
3/16/2021	0.065 (J)	
10/5/2021		0.122
5/9/2022		0.0682 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	0.06 (J)	
2/8/2018	0.04 (J)	
4/25/2018	0.04 (J)	
6/26/2018	0.05 (J)	
8/7/2018	0.05 (J)	
10/23/2018	0.06 (J)	
12/3/2018	<0.125	
2/5/2019	0.0581 (J)	
2/26/2019	0.0816 (J)	
8/20/2019	<0.125	
4/13/2020	<0.125	
8/26/2020	<0.125	
3/17/2021	<0.125	
10/5/2021		<0.125
5/10/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	0.09 (J)	
2/8/2018	0.07 (J)	
4/25/2018	0.07 (J)	
6/26/2018	0.09 (J)	
8/8/2018	0.1	
10/23/2018	0.1	
12/4/2018	0.06 (J)	
2/6/2019	<0.1	
2/27/2019	0.0824 (J)	
8/21/2019	0.068 (J)	
4/15/2020	0.0775 (J)	
8/26/2020	<0.1	
3/23/2021	<0.1	
10/5/2021		0.0933 (J)
5/10/2022		0.0627 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	0.14	
2/8/2018	0.11	
4/25/2018	0.09 (J)	
6/26/2018	0.1	
8/8/2018	0.1	
10/23/2018	0.11	
12/4/2018	0.08 (J)	
2/6/2019	<0.1	
2/27/2019	0.108	
8/21/2019	0.0648 (J)	
4/14/2020	0.0845 (J)	
8/26/2020	0.0732 (J)	
3/23/2021	0.0802 (J)	
10/12/2021		0.123
5/11/2022		0.0695 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	0.12	
2/12/2018	0.11	
4/25/2018	0.12	
6/26/2018	0.13	
8/8/2018	0.12	
10/23/2018	0.13	
12/5/2018	0.04 (J)	
2/6/2019	<0.1	
2/27/2019	0.147	
8/21/2019	0.0984 (J)	
4/14/2020	0.133	
8/26/2020	0.13	
3/23/2021	0.132	
10/12/2021		0.147
5/11/2022		0.108 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	0.13	
7/18/2018	0.11	
8/7/2018	0.11	
9/5/2018	0.13	
9/24/2018	0.13	
10/22/2018	0.13	
12/3/2018	0.08 (J)	
2/5/2019	0.0934 (J)	
2/25/2019	<0.1	
8/20/2019	0.0889 (J)	
4/13/2020	0.103	
8/24/2020	0.114	
3/24/2021	0.0725 (J)	
10/5/2021		<0.1
5/9/2022		0.0824 (J)

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	0.05 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.125	
2/7/2019	<0.125	
2/25/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/24/2020	<0.125	
3/16/2021	<0.125	
10/12/2021		<0.125
5/10/2022		<0.125

Prediction Limit

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	0.04 (J)	
7/18/2018	0.04 (J)	
8/8/2018	0.04 (J)	
9/5/2018	0.04 (J)	
9/24/2018	0.04 (J)	
10/23/2018	0.04 (J)	
12/3/2018	<0.125	
2/7/2019	<0.125	
2/25/2019	<0.125	
8/21/2019	<0.125	
4/15/2020	<0.125	
8/24/2020	<0.125	
3/16/2021	<0.125	
10/12/2021		<0.125
5/10/2022		<0.125

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-1
12/6/2017	6.5	
2/6/2018	6.48	
4/23/2018	6.36	
6/26/2018	6.32	
8/7/2018	6.32	
10/22/2018	6.2	
12/4/2018	6.31	
2/5/2019	6.1	
2/26/2019	6.11	
8/21/2019	6.01	
4/15/2020	5.65	
8/25/2020	6	
3/16/2021	5.87	
10/5/2021		5.79
5/10/2022		5.77

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-10
12/6/2017	6.83	
2/7/2018	6.82	
4/24/2018	6.74	
6/27/2018	6.67	
8/7/2018	6.72	
10/22/2018	6.73	
12/4/2018	6.77	
2/6/2019	6.67	
2/26/2019	6.77	
8/22/2019	6.37	
4/15/2020	6.85	
8/26/2020	6.73	
3/23/2021	6.87	
10/11/2021		6.72
5/10/2022		6.39

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-11	GSD-AP-MW-11
12/6/2017	6.81	
2/7/2018	6.74	
4/24/2018	6.62	
6/27/2018	6.69	
8/8/2018	6.67	
10/23/2018	6.73	
12/4/2018	6.67	
2/6/2019	6.58	
2/27/2019	6.56	
8/22/2019	6.26	
4/14/2020	6.63	
8/26/2020	6.38	
3/23/2021	6.58	
10/12/2021		6.66
5/17/2022		6.44

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-12	GSD-AP-MW-12
12/6/2017	5.6	
2/8/2018	5.44	
4/24/2018	5.41	
6/27/2018	5.45	
8/8/2018	5.46	
10/23/2018	5.47	
12/5/2018	5.45	
2/6/2019	5.31	
2/27/2019	5.4	
8/22/2019	5.35	
4/14/2020	5.39	
8/26/2020	5.63	
3/23/2021	5.5	
10/5/2021		5.19
5/10/2022		4.78

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-14	GSD-AP-MW-14
6/27/2018	3.95	
7/18/2018	4.02	
8/6/2018	4.07	
9/5/2018	4.07	
9/24/2018	4.07	
10/24/2018	4.1	
12/5/2018	4.1	
2/5/2019	4.02	
2/28/2019	3.94 (E)	
8/20/2019	4	
4/16/2020	3.93	
8/25/2020	4.03	
3/22/2021	3.25	
10/12/2021		4.04
5/9/2022		3.6

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-16	GSD-AP-MW-16
10/24/2018	5.27	
11/14/2018	4.99	
11/28/2018	4.74	
12/5/2018	4.76	
12/18/2018	4.57	
1/3/2019	4.56	
1/24/2019	4.45	
2/5/2019	4.3	
2/28/2019	4.35	
8/19/2019	4.57	
4/15/2020	4.49	
8/25/2020	4.2	
3/22/2021	3.45	
10/6/2021		4.16
5/17/2022		4.34

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-17	GSD-AP-MW-17
10/24/2018	7.92	
11/14/2018	8.23	
11/28/2018	8.95	
12/5/2018	8.77	
12/18/2018	8.99	
1/3/2019	9.35	
1/24/2019	9.42	
2/5/2019	9.23	
2/28/2019	9.48	
8/19/2019	7.93	
4/16/2020	8.1	
8/24/2020	8.17	
3/22/2021	7.85	
10/6/2021		7.92
5/9/2022		7.29

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-MW-2
12/6/2017	6.61	
2/6/2018	6.66	
4/23/2018	6.54	
6/27/2018	6.63	
8/7/2018	6.57	
10/22/2018	6.55	
12/4/2018	6.52	
2/5/2019	6.47	
2/26/2019	6.54	
8/20/2019	6.3	
4/15/2020	6.45	
8/25/2020	6.65	
3/24/2021	6.49	
10/11/2021		6.59
5/16/2022		6.16

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-3	GSD-AP-MW-3
12/6/2017	6.54	
2/6/2018	6.39	
4/24/2018	6.02	
6/27/2018	6.07	
8/7/2018	6.28	
10/22/2018	6.3	
12/3/2018	6.38	
2/5/2019	5.83	
2/25/2019	5.93	
8/20/2019	5.73	
4/13/2020	5.83	
8/26/2020	5.87	
3/22/2021	5.51	
10/5/2021		5.76
5/10/2022		5.95

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-4	GSD-AP-MW-4
12/7/2017	6.73	
2/6/2018	6.76	
4/24/2018	6.66	
6/26/2018	6.61	
8/6/2018	6.68	
10/22/2018	6.63	
12/3/2018	6.67	
2/5/2019	6.63	
2/26/2019	6.64	
8/20/2019	6.33	
4/15/2020	6.77	
8/26/2020	6.68	
3/24/2021	6.86	
10/5/2021		6.58
5/16/2022		6.61

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-5	GSD-AP-MW-5
12/7/2017	6.32	
2/6/2018	6.27	
4/25/2018	6.14	
6/27/2018	6.15	
8/7/2018	6.18	
10/23/2018	6.15	
12/5/2018	6.15	
2/5/2019	6.08	
2/27/2019	6.11	
8/20/2019	6.11	
4/13/2020	6.18	
8/24/2020	6.11	
3/16/2021	6.22	
10/5/2021		6.24
5/9/2022		5.43

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-6
12/7/2017	6.38	
2/8/2018	6.29	
4/25/2018	6.15	
6/26/2018	6.09	
8/7/2018	6.16	
10/23/2018	6.1	
12/3/2018	6.09	
2/5/2019	6.04	
2/26/2019	6.17	
8/20/2019	5.4	
4/13/2020	5.82	
8/26/2020	5.96	
3/17/2021	5.92	
10/5/2021		5.74
5/10/2022		5.51

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-7	GSD-AP-MW-7
12/7/2017	6.62	
2/8/2018	6.39	
4/25/2018	6.17	
6/26/2018	6.38	
8/8/2018	6.56	
10/23/2018	6.54	
12/4/2018	6.33	
2/6/2019	6.13	
2/27/2019	6.12	
8/21/2019	5.97	
4/15/2020	6.16	
8/26/2020	6.11	
3/23/2021	6.04	
10/5/2021		6.06
5/10/2022		5.08

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-8
12/7/2017	6.81	
2/8/2018	6.73	
4/25/2018	6.61	
6/26/2018	6.59	
8/8/2018	6.6	
10/23/2018	6.64	
12/4/2018	6.68	
2/6/2019	6.62	
2/27/2019	6.56	
8/21/2019	6.16	
4/14/2020	6.49	
8/26/2020	6.29	
3/23/2021	6.47	
10/12/2021		6.61
5/11/2022		6.25

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-9	GSD-AP-MW-9
12/7/2017	6.93	
2/8/2018	6.96	
2/12/2018	6.88	
4/25/2018	6.89	
6/26/2018	6.85	
8/8/2018	6.94	
10/23/2018	6.93	
12/5/2018	6.94	
2/6/2019	6.73	
2/27/2019	6.85	
8/21/2019	6.61	
4/14/2020	7.02	
8/26/2020	6.75	
3/23/2021	6.85	
10/12/2021		6.9
5/11/2022		6.7

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-1
6/27/2018	6.79	
7/18/2018	6.8	
8/7/2018	6.73	
9/5/2018	6.75	
9/24/2018	6.83	
10/22/2018	6.76	
12/3/2018	6.6	
2/5/2019	6.66	
2/25/2019	6.6	
8/20/2019	6.3	
4/13/2020	6.66	
8/24/2020	6.64	
3/24/2021	5.85	
10/5/2021		6.46
5/9/2022		6.03

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-5
6/27/2018	5.81	
7/18/2018	5.74	
8/8/2018	5.7	
9/5/2018	5.61	
9/24/2018	5.59	
10/23/2018	5.6	
12/3/2018	5.73	
2/7/2019	5.44	
2/25/2019	5.46	
8/21/2019	5.13	
4/15/2020	5.31	
8/24/2020	4.65	
3/16/2021	5.47	
10/12/2021		5.33
5/10/2022		5.38

Prediction Limit

Constituent: pH (pH) Analysis Run 7/18/2022 1:44 PM View: Appendix III - Intrawell

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-6	GSD-AP-PZ-6
6/27/2018	5.44	
7/18/2018	5.58	
8/8/2018	5.55	
9/5/2018	5.56	
9/24/2018	5.57	
10/23/2018	5.55	
12/3/2018	5.6	
2/7/2019	5.51	
2/25/2019	5.54	
8/21/2019	5.44	
4/15/2020	5.52	
8/24/2020	5.38	
3/16/2021	5.56	
10/12/2021		5.41
5/10/2022		5.57

FIGURE F.

Appendix III - Trend Tests - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06646**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-4**	**-0.04879**	**-80**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0618**	**-79**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.98**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-11**	**2.65**	**58**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-2**	**-13.48**	**-66**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-9.451**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.3088**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.704**	**-107**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.363**	**-76**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	**GSD-AP-MW-7**	**-0.1581**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-87.67**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.7**	**57**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-41.2**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Appendix III - Trend Tests - All Results

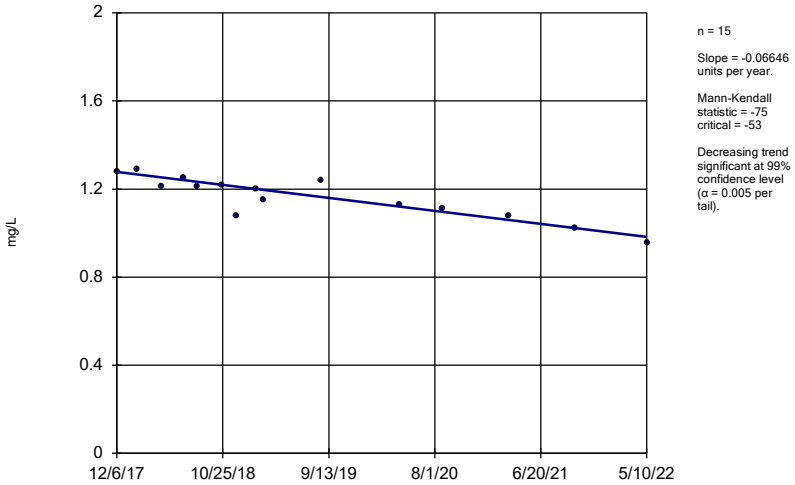
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 1:55 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GSD-AP-MW-1**	**-0.06646**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-11	0.007821	48	53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-14 (bg)	0	0	53	No	15	100	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-16 (bg)	0.009899	50	58	No	16	62.5	n/a	n/a	0.01	NP
Boron (mg/L)	GSD-AP-MW-17 (bg)	-0.0009955	-29	-53	No	15	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-2**	**-0.08037**	**-78**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GSD-AP-MW-3	0.04351	50	58	No	16	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GSD-AP-MW-4**	**-0.04879**	**-80**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GSD-AP-MW-5**	**-0.0618**	**-79**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-1**	**-19.98**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-10	0.334	15	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-11**	**2.65**	**58**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-12	1.352	5	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-14 (bg)	-0.5428	-12	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-16 (bg)	-0.1677	-3	-58	No	16	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-17 (bg)	1.487	31	53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GSD-AP-MW-2**	**-13.48**	**-66**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GSD-AP-MW-3**	**-9.451**	**-82**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GSD-AP-MW-5	-1.382	-29	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-8	-0.3419	-3	-53	No	15	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GSD-AP-MW-9	0.1864	1	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-1	0	2	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-10	0	2	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-11	0.009156	4	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-12	0.01565	3	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-14 (bg)	0.02005	9	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-16 (bg)	-0.005781	-4	-58	No	16	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GSD-AP-MW-17 (bg)**	**-0.3088**	**-69**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GSD-AP-MW-3**	**-0.704**	**-107**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GSD-AP-MW-4	0.0704	9	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-5	-0.2493	-46	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-6	-0.1995	-44	-53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-8	0.1165	22	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-MW-9	0.1961	33	53	No	15	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GSD-AP-PZ-5	0.0557	23	53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-12	-0.06835	-32	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-14 (bg)	-0.03724	-30	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-16 (bg)**	**-0.363**	**-76**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH (pH)	GSD-AP-MW-17 (bg)	-0.2684	-24	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-2	-0.05984	-44	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	GSD-AP-MW-5	-0.03416	-26	-53	No	15	0	n/a	n/a	0.01	NP
pH (pH)	**GSD-AP-MW-7**	**-0.1581**	**-75**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GSD-AP-MW-1	-12.74	-16	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-14 (bg)	-0.307	-2	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-16 (bg)	26.51	53	58	No	16	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-17 (bg)	-0.882	-50	-53	No	15	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GSD-AP-MW-3	-0.5782	-5	-58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-1**	**-87.67**	**-82**	**-53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	**GSD-AP-MW-11**	**15.7**	**57**	**53**	**Yes**	**15**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Total Dissolved Solids (mg/L)	GSD-AP-MW-12	-9.733	-10	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-14 (bg)	-6.186	-7	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-16 (bg)	27.91	48	58	No	16	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	GSD-AP-MW-17 (bg)	-4.419	-26	-53	No	15	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	**GSD-AP-MW-3**	**-41.2**	**-88**	**-58**	**Yes**	**16**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 15

Slope = -0.06646 units per year.

Mann-Kendall statistic = -75 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

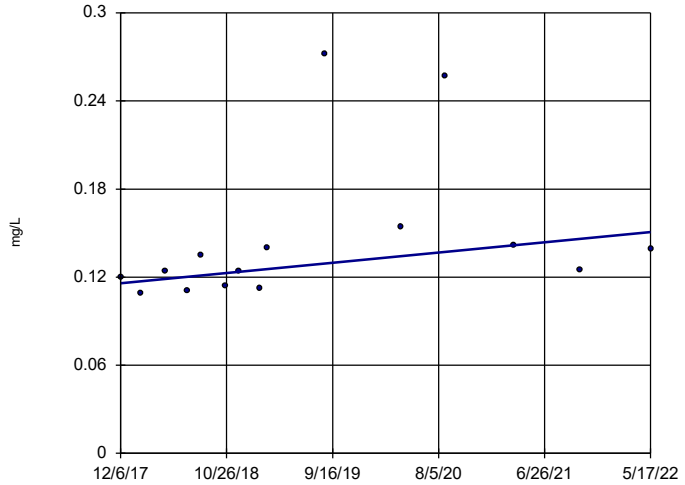
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 15

Slope = 0.007821 units per year.

Mann-Kendall statistic = 48 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

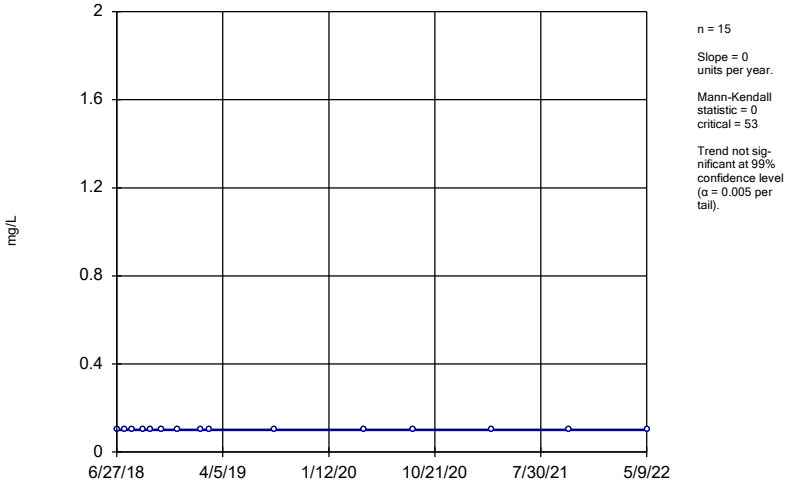
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 0 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

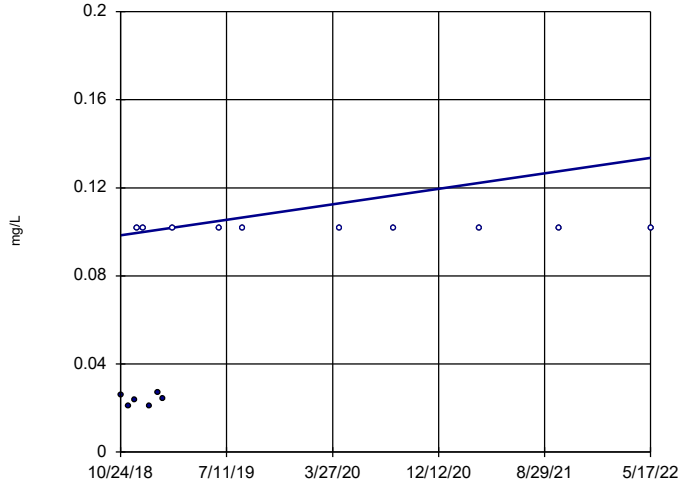
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Hollow symbols indicate censored values.

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 16

Slope = 0.009899 units per year.

Mann-Kendall statistic = 50 critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

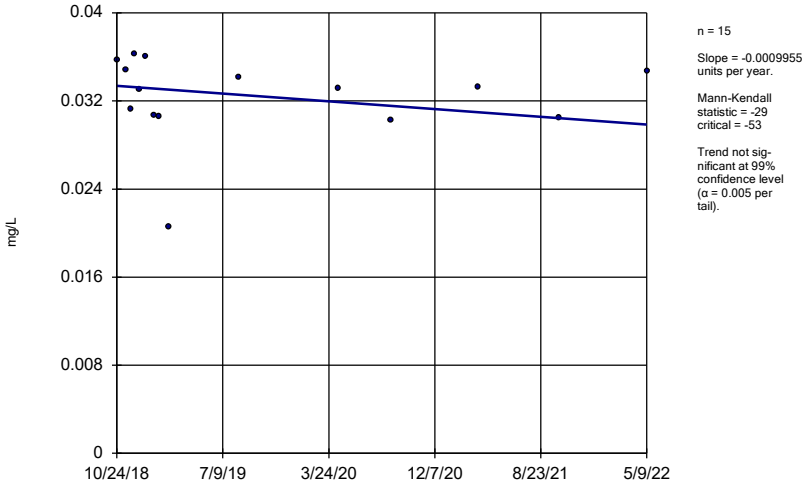
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 15

Slope = -0.0009955 units per year.

Mann-Kendall statistic = -29
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

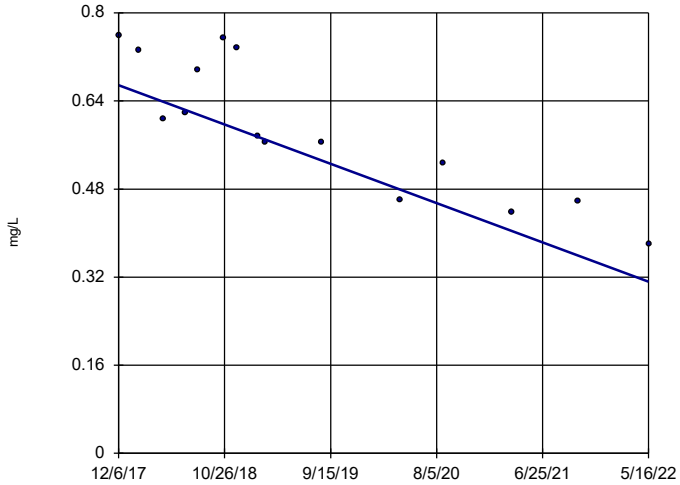
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 15

Slope = -0.08037 units per year.

Mann-Kendall statistic = -78
critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

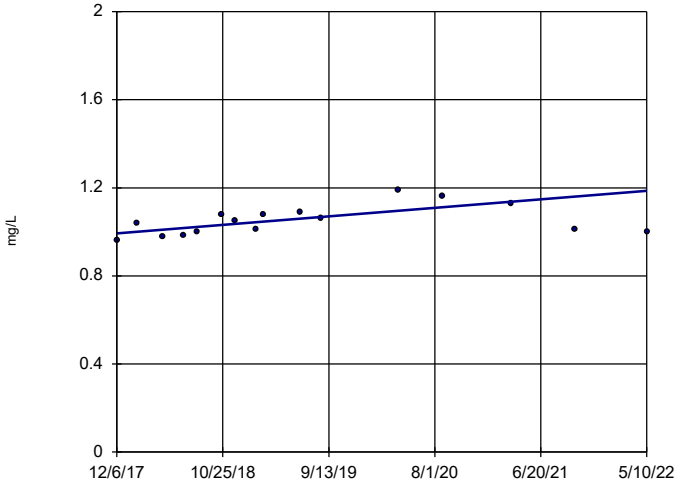
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 16

Slope = 0.04351 units per year.

Mann-Kendall statistic = 50
critical = 58

Trend not significant at 99% confidence level (α = 0.005 per tail).

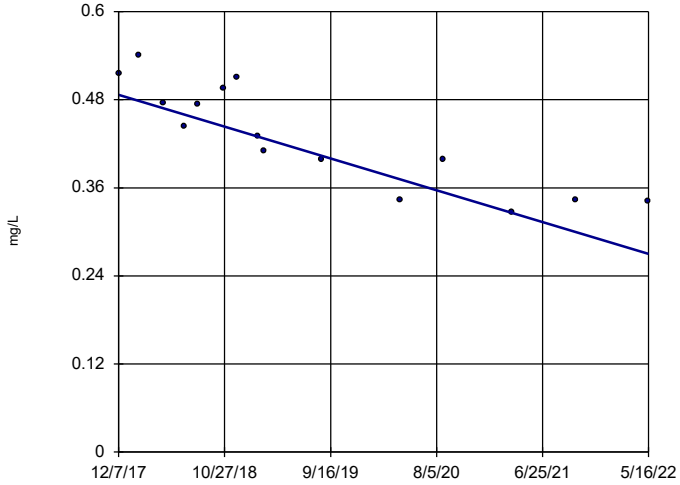
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 15

Slope = -0.04879 units per year.

Mann-Kendall statistic = -80
critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

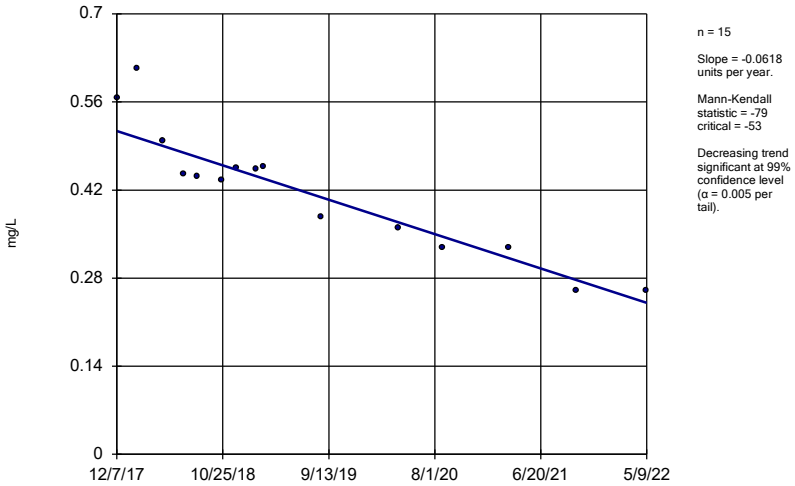
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 15

Slope = -0.0618 units per year.

Mann-Kendall statistic = -79 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

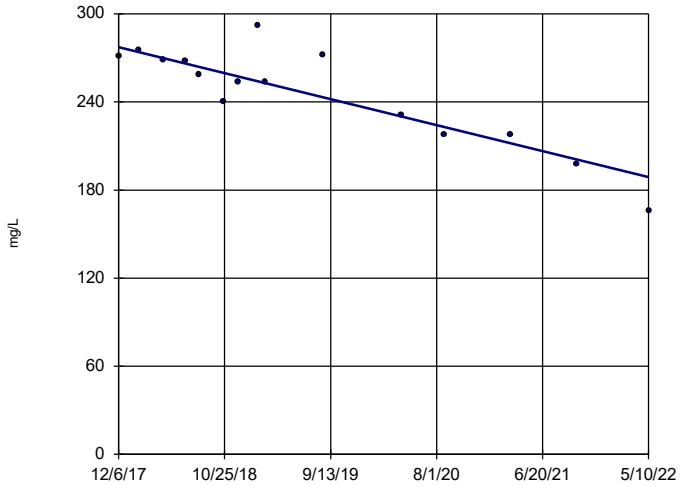
Constituent: Boron Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 15

Slope = -19.98 units per year.

Mann-Kendall statistic = -69 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

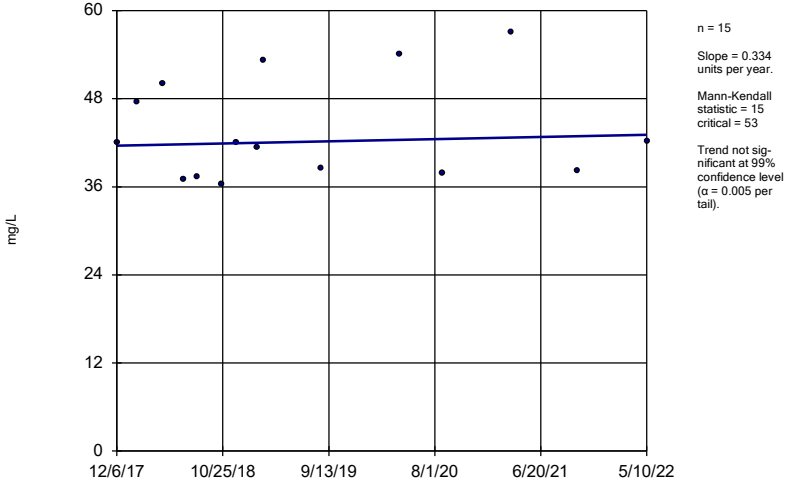
Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 15

Slope = 0.334 units per year.

Mann-Kendall statistic = 15 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

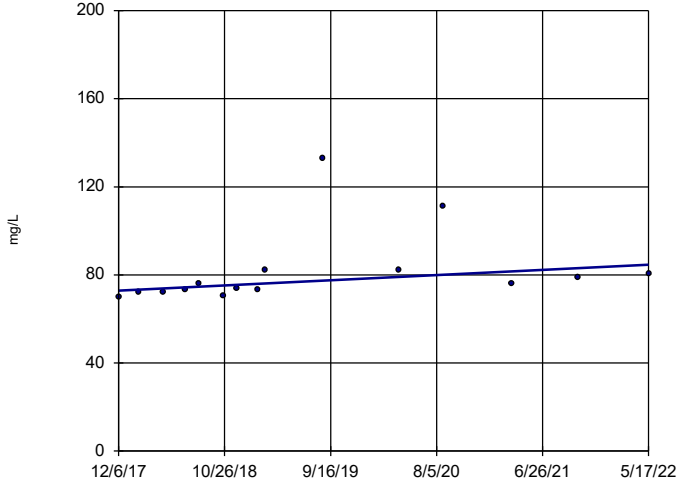
Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 15

Slope = 2.65 units per year.

Mann-Kendall statistic = 58 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

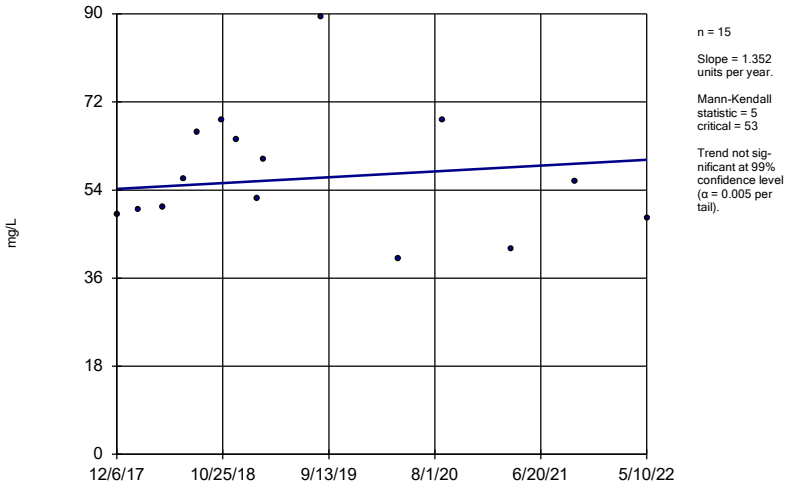
Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 15

Slope = 1.352 units per year.

Mann-Kendall statistic = 5
critical = 53

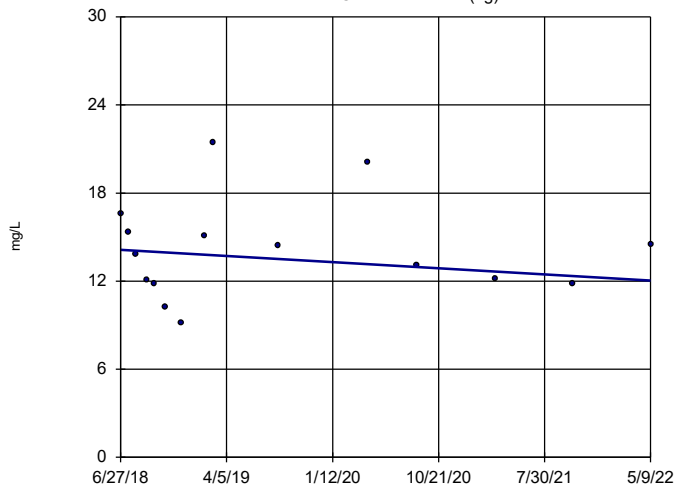
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 15

Slope = -0.5428 units per year.

Mann-Kendall statistic = -12
critical = -53

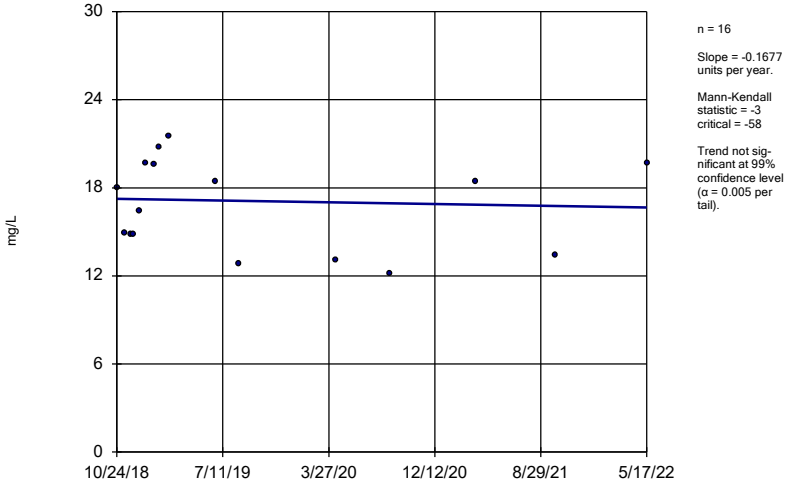
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 16

Slope = -0.1677 units per year.

Mann-Kendall statistic = -3
critical = -58

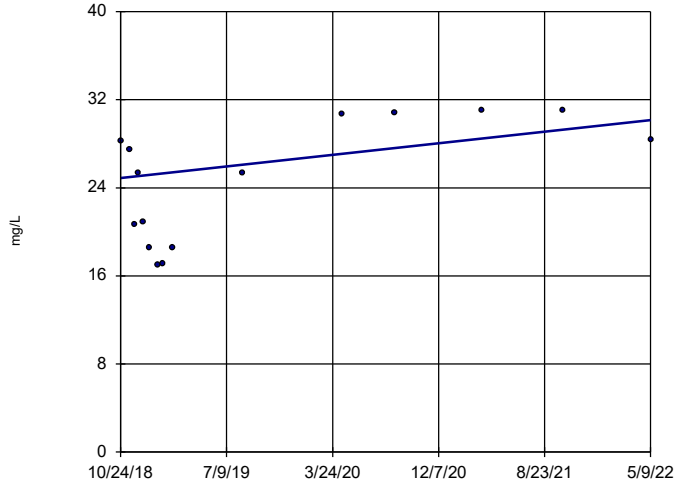
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 15

Slope = 1.487 units per year.

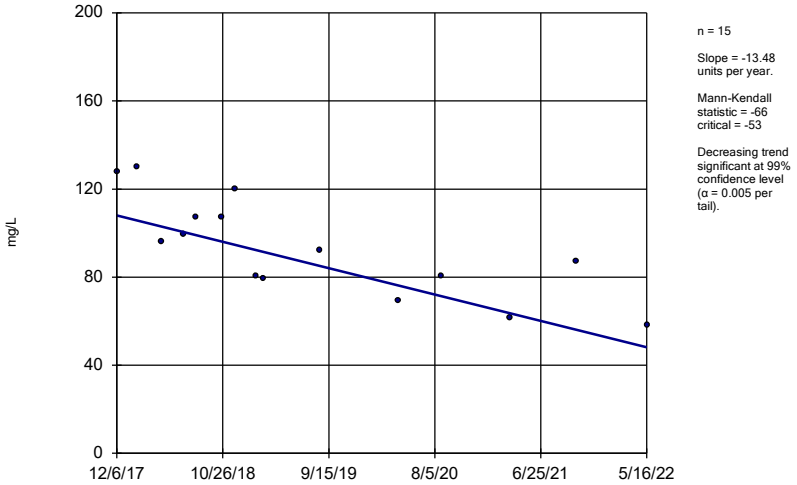
Mann-Kendall statistic = 31
critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-2



n = 15

Slope = -13.48 units per year.

Mann-Kendall statistic = -66
critical = -53

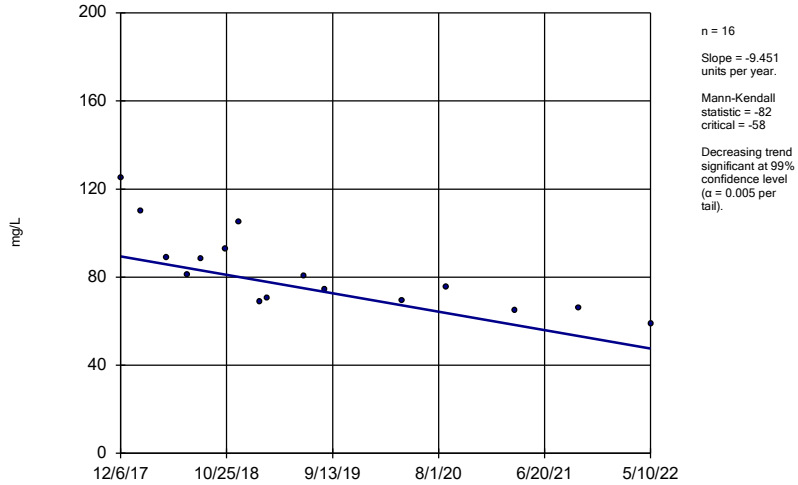
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 16

Slope = -9.451 units per year.

Mann-Kendall statistic = -82
critical = -58

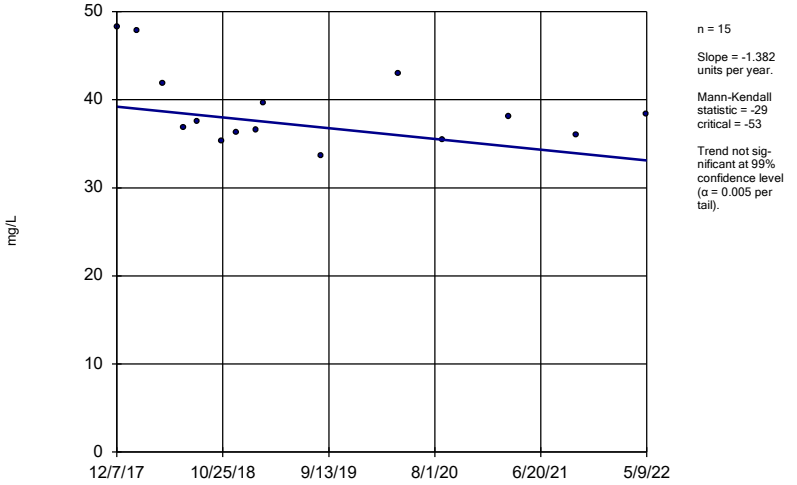
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 15

Slope = -1.382 units per year.

Mann-Kendall statistic = -29
critical = -53

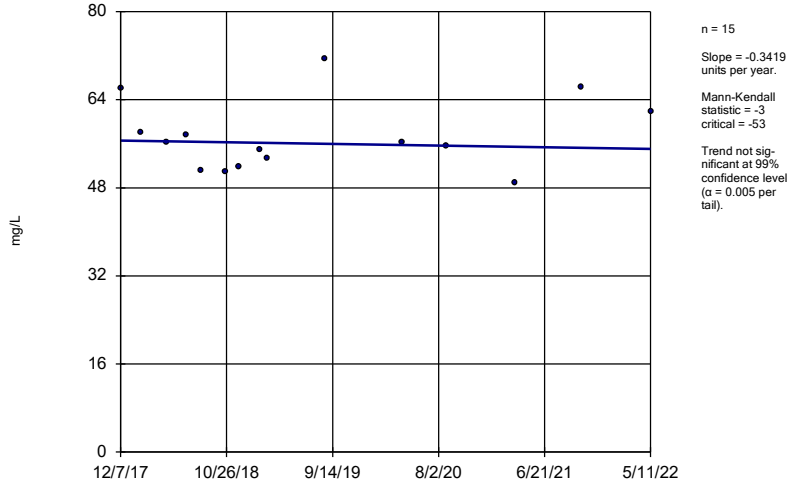
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-8



n = 15

Slope = -0.3419 units per year.

Mann-Kendall statistic = -3
critical = -53

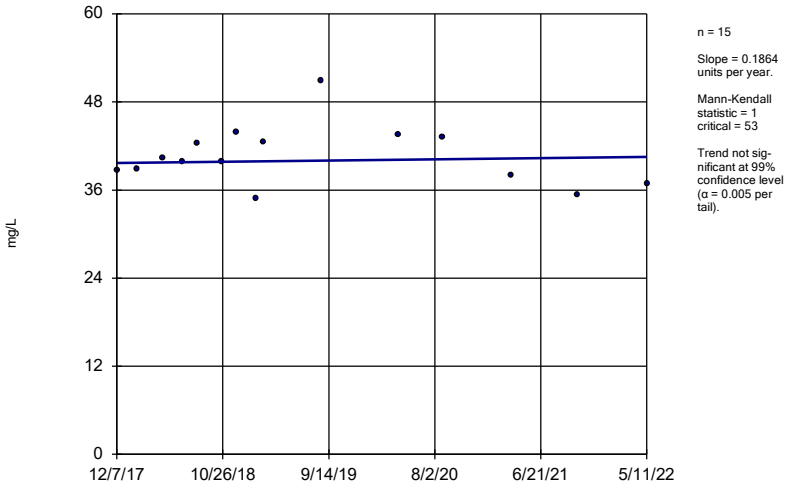
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 15

Slope = 0.1864 units per year.

Mann-Kendall statistic = 1 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

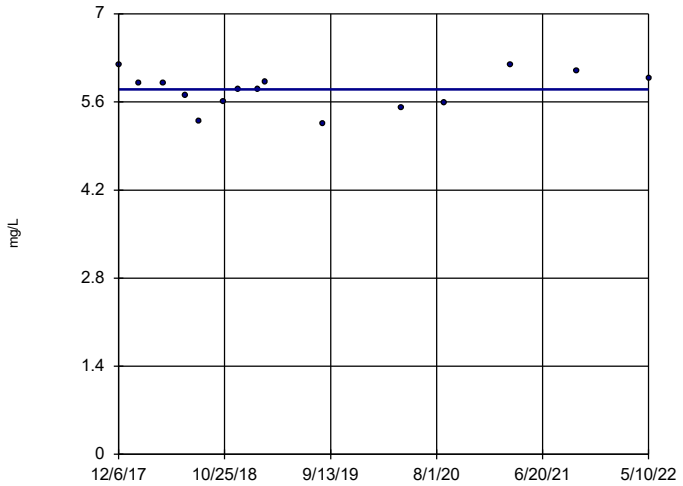
Constituent: Calcium Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 2 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

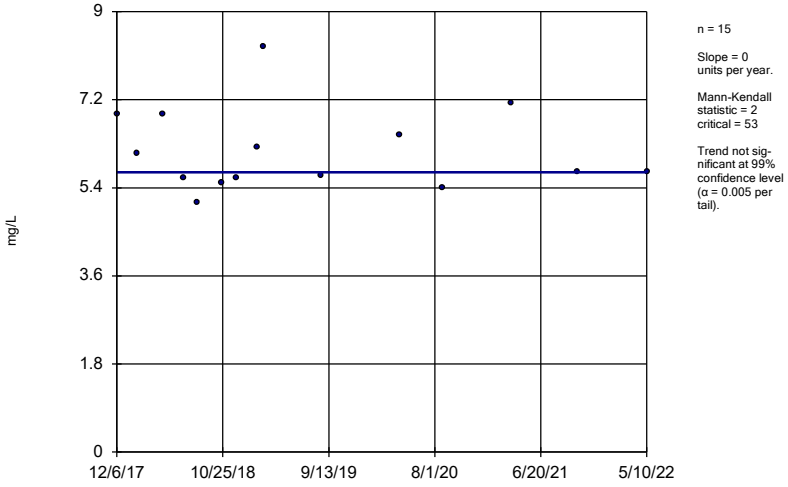
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-10



n = 15

Slope = 0 units per year.

Mann-Kendall statistic = 2 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

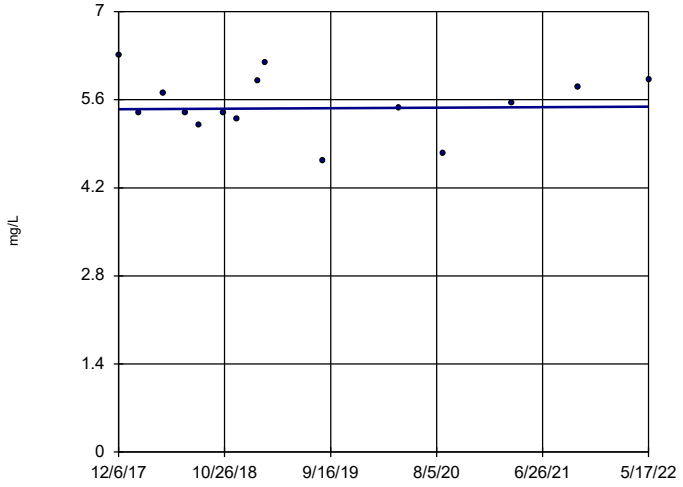
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 15

Slope = 0.009156 units per year.

Mann-Kendall statistic = 4 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

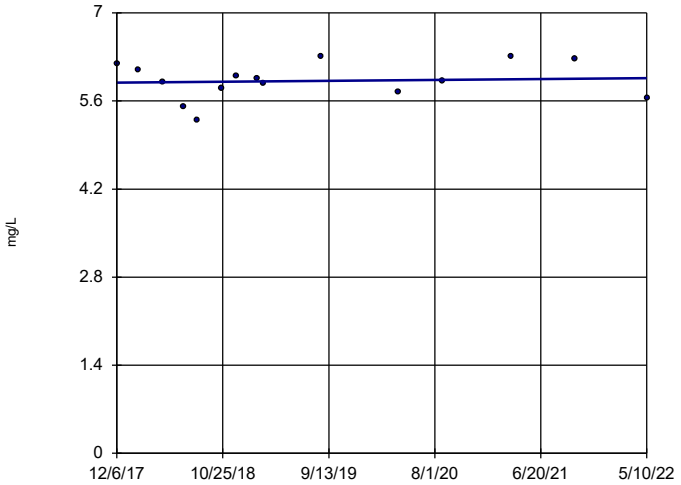
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 15

Slope = 0.01565 units per year.

Mann-Kendall statistic = 3 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

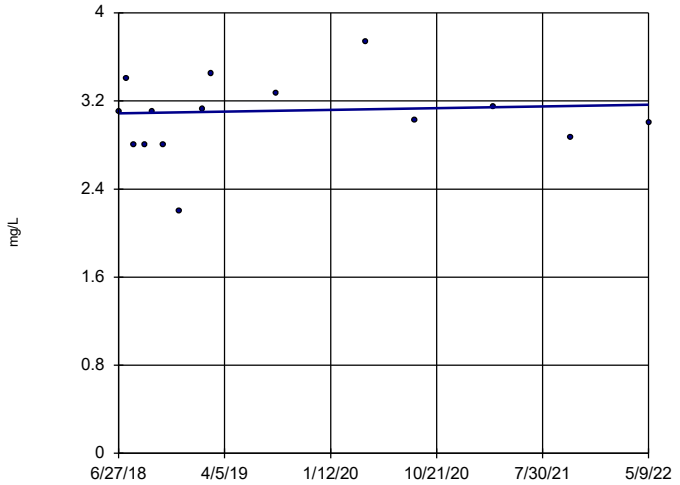
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 15

Slope = 0.02005 units per year.

Mann-Kendall statistic = 9 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

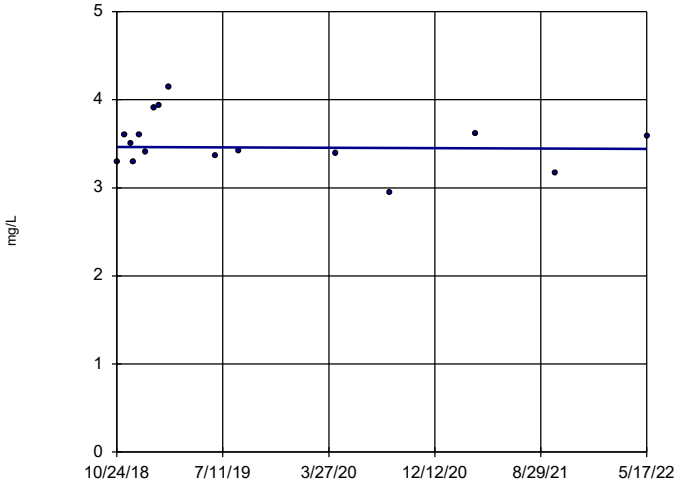
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 16

Slope = -0.005781 units per year.

Mann-Kendall statistic = -4 critical = -58

Trend not significant at 99% confidence level (α = 0.005 per tail).

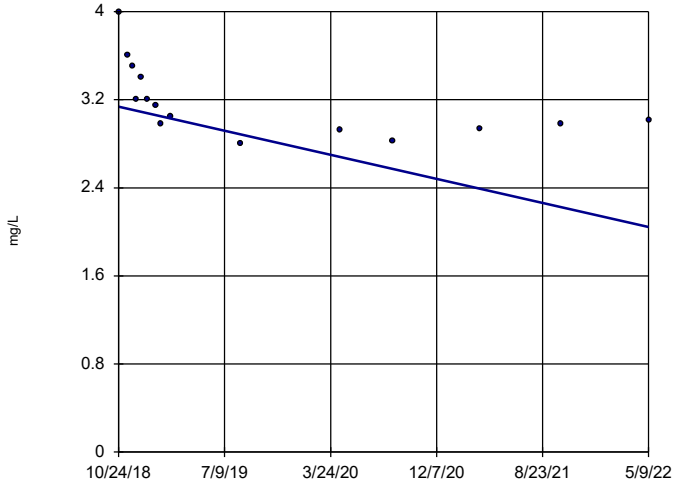
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 15

Slope = -0.3088 units per year.

Mann-Kendall statistic = -69 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

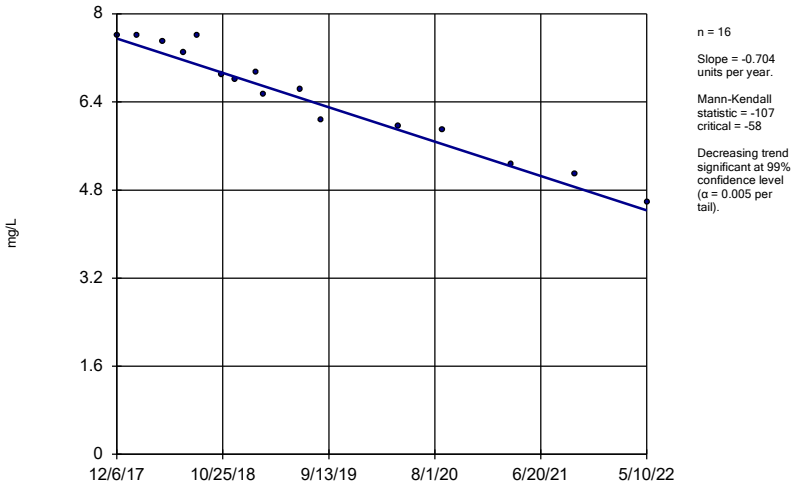
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 16

Slope = -0.704 units per year.

Mann-Kendall statistic = -107 critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

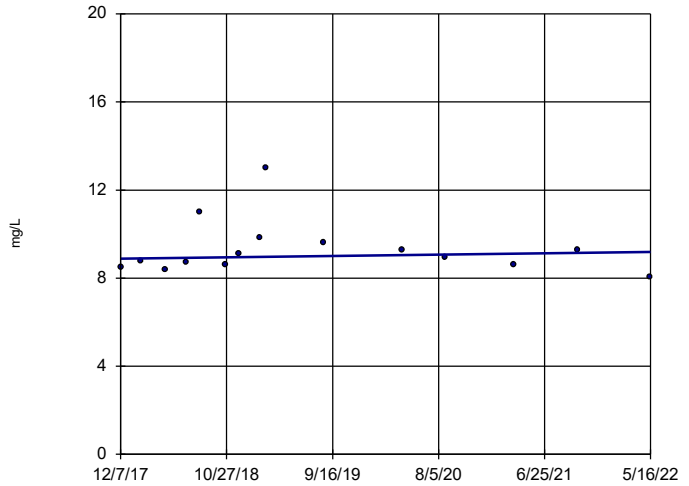
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-4



n = 15

Slope = 0.0704 units per year.

Mann-Kendall statistic = 9 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

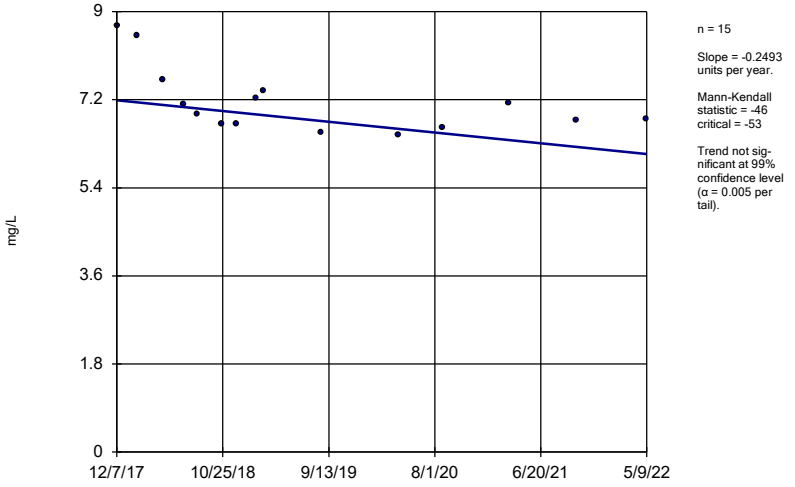
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-5



n = 15

Slope = -0.2493 units per year.

Mann-Kendall statistic = -46 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

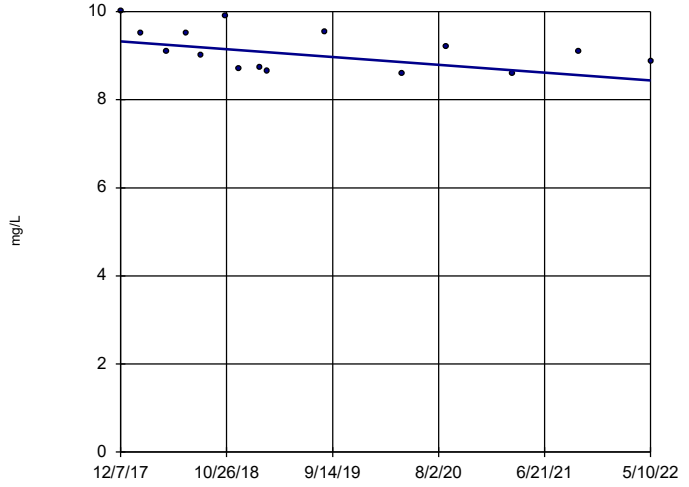
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-6



n = 15

Slope = -0.1995 units per year.

Mann-Kendall statistic = -44 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

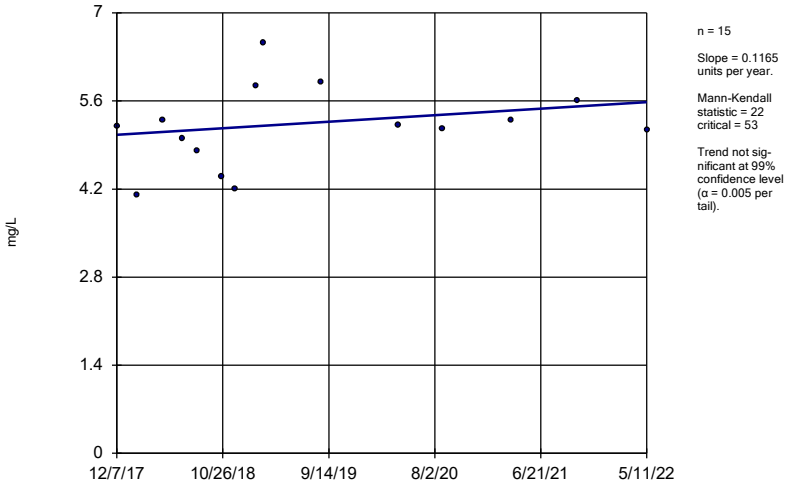
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-8



n = 15

Slope = 0.1165 units per year.

Mann-Kendall statistic = 22 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

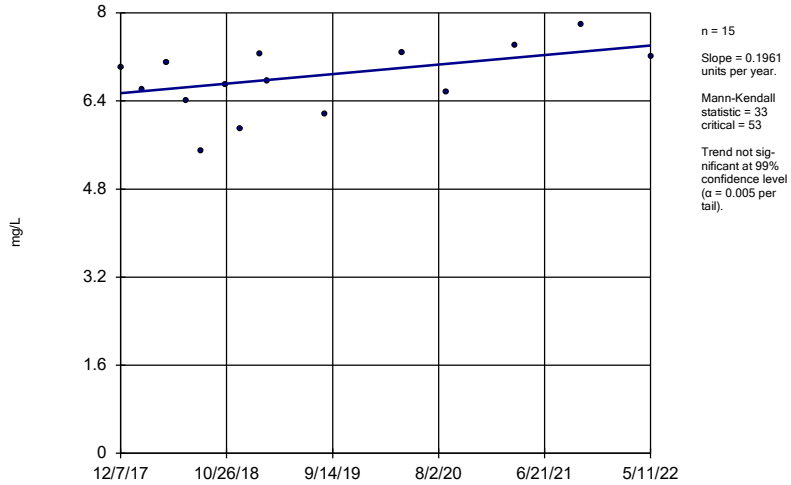
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-9



n = 15

Slope = 0.1961 units per year.

Mann-Kendall statistic = 33 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

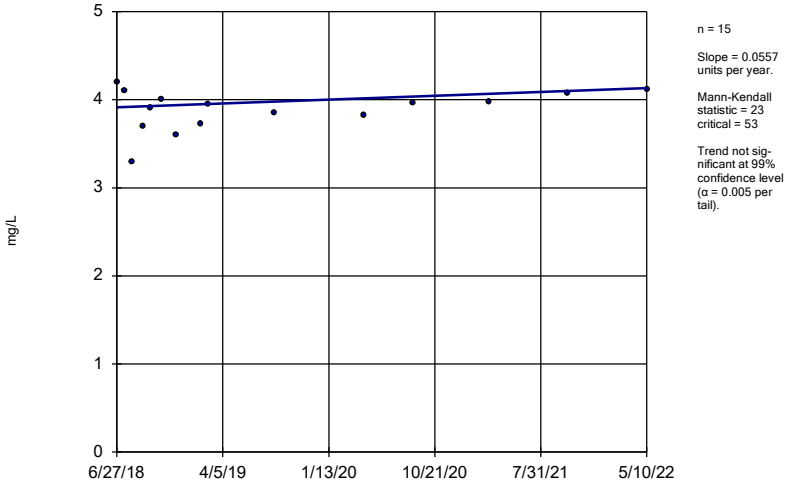
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-PZ-5



n = 15

Slope = 0.0557 units per year.

Mann-Kendall statistic = 23 critical = 53

Trend not significant at 99% confidence level (α = 0.005 per tail).

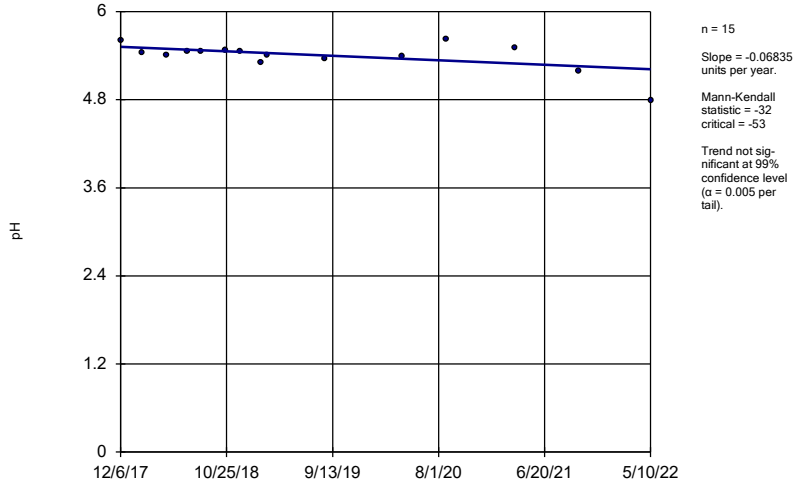
Constituent: Chloride Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 15

Slope = -0.06835 units per year.

Mann-Kendall statistic = -32 critical = -53

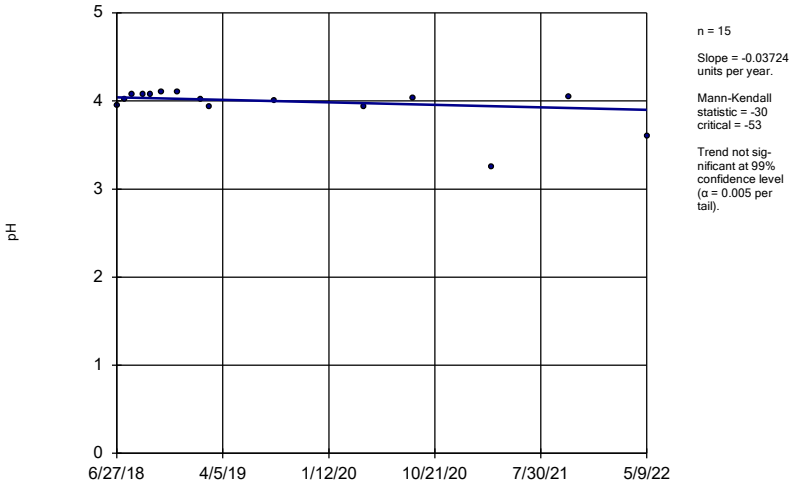
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 15

Slope = -0.03724 units per year.

Mann-Kendall statistic = -30
critical = -53

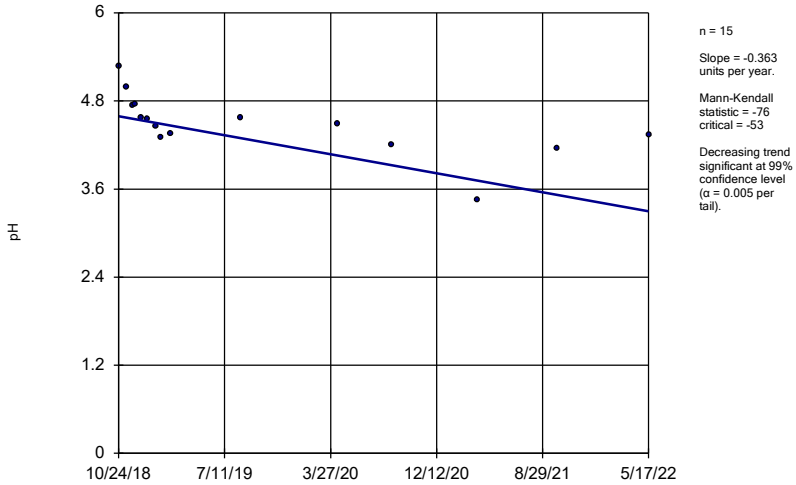
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 15

Slope = -0.363 units per year.

Mann-Kendall statistic = -76
critical = -53

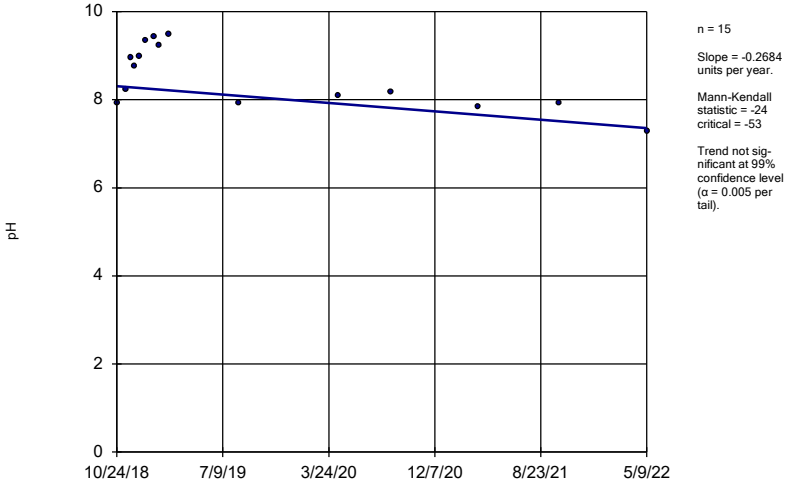
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 15

Slope = -0.2684 units per year.

Mann-Kendall statistic = -24
critical = -53

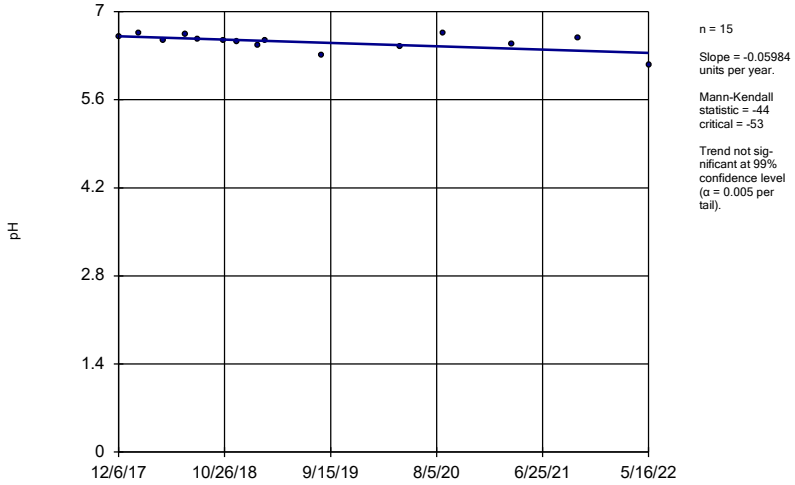
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-2



n = 15

Slope = -0.05984 units per year.

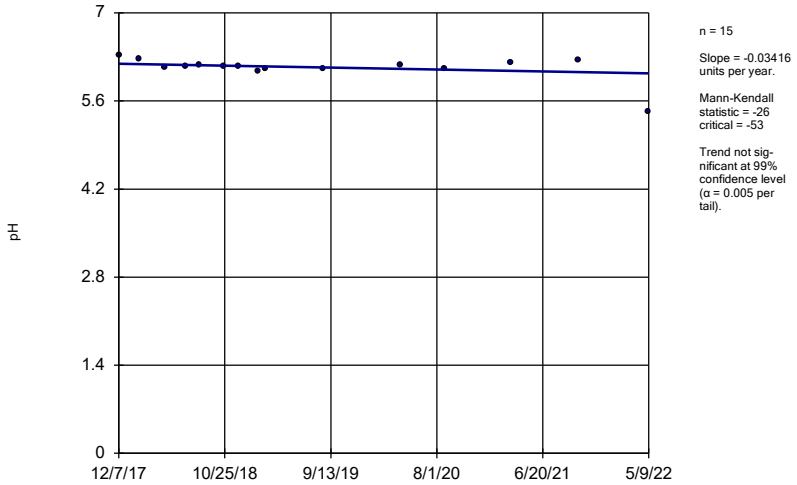
Mann-Kendall statistic = -44
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-5



n = 15

Slope = -0.03416 units per year.

Mann-Kendall statistic = -26
critical = -53

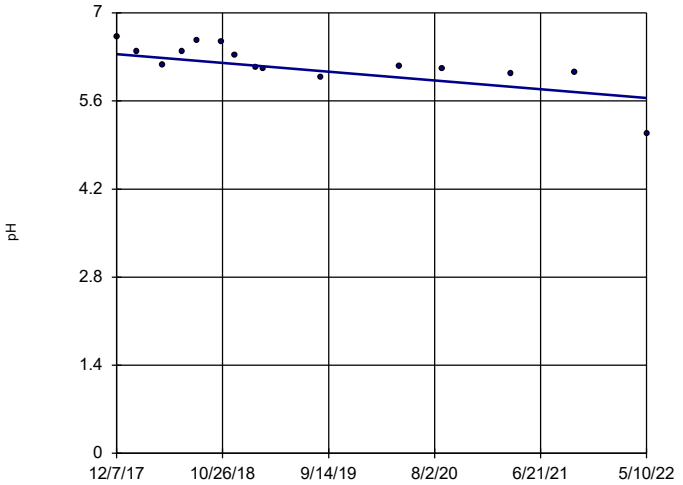
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-7



n = 15

Slope = -0.1581 units per year.

Mann-Kendall statistic = -75
critical = -53

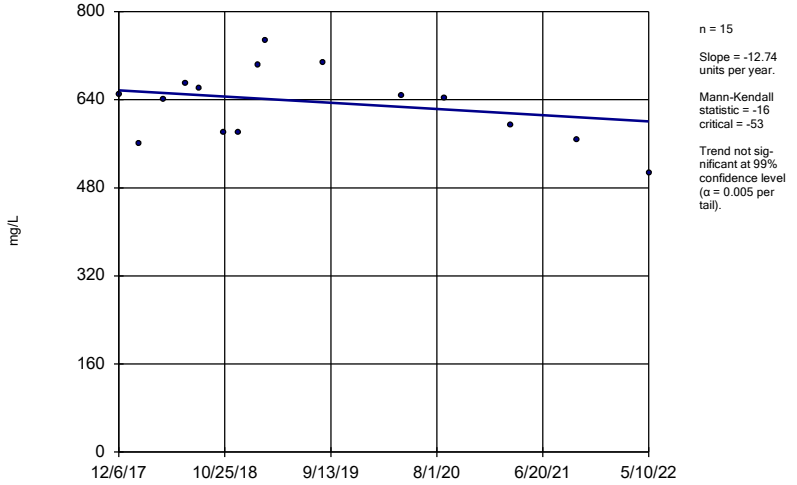
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-1



n = 15

Slope = -12.74 units per year.

Mann-Kendall statistic = -16
critical = -53

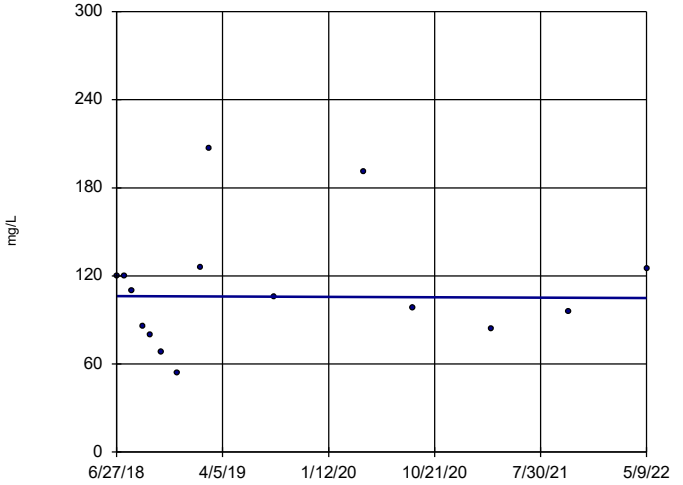
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 15

Slope = -0.307 units per year.

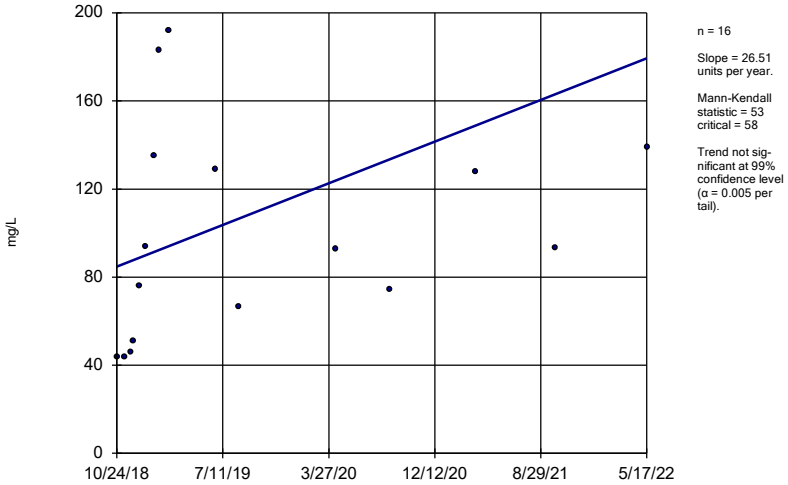
Mann-Kendall statistic = -2
critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2022 1:52 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 16

Slope = 26.51 units per year.

Mann-Kendall statistic = 53 critical = 58

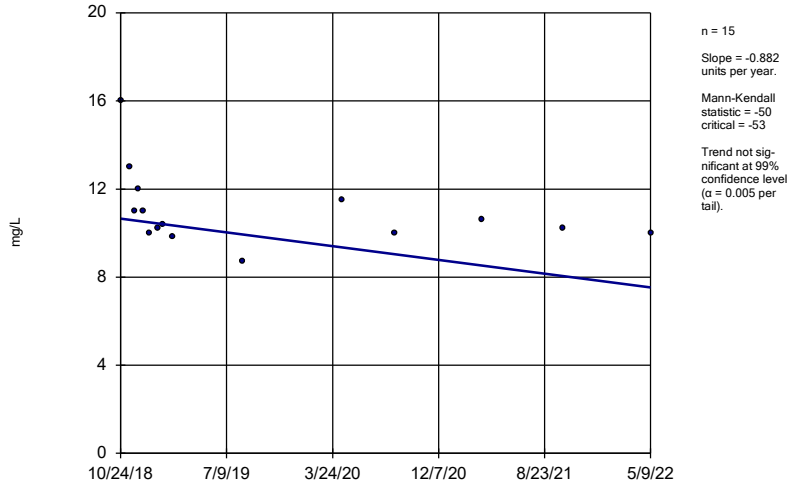
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 15

Slope = -0.882 units per year.

Mann-Kendall statistic = -50 critical = -53

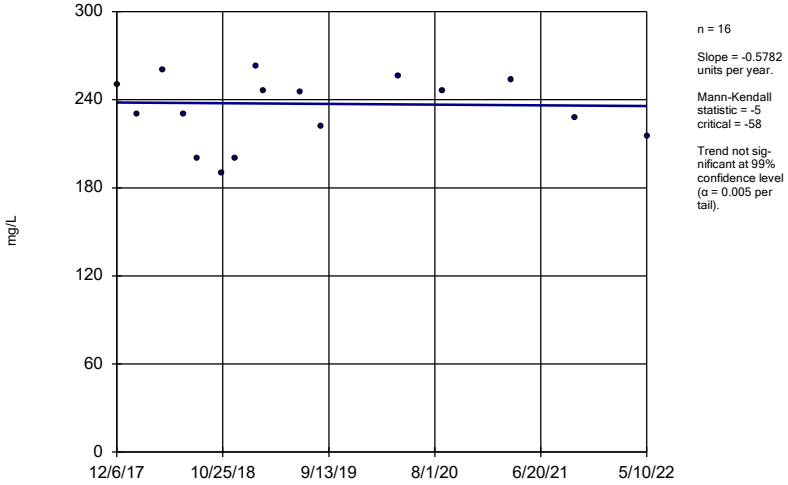
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-3



n = 16

Slope = -0.5782 units per year.

Mann-Kendall statistic = -5 critical = -58

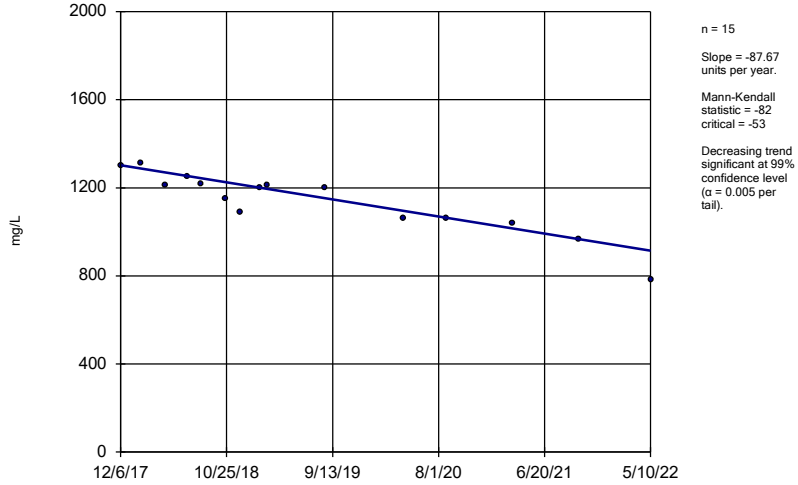
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-1



n = 15

Slope = -87.67 units per year.

Mann-Kendall statistic = -82 critical = -53

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

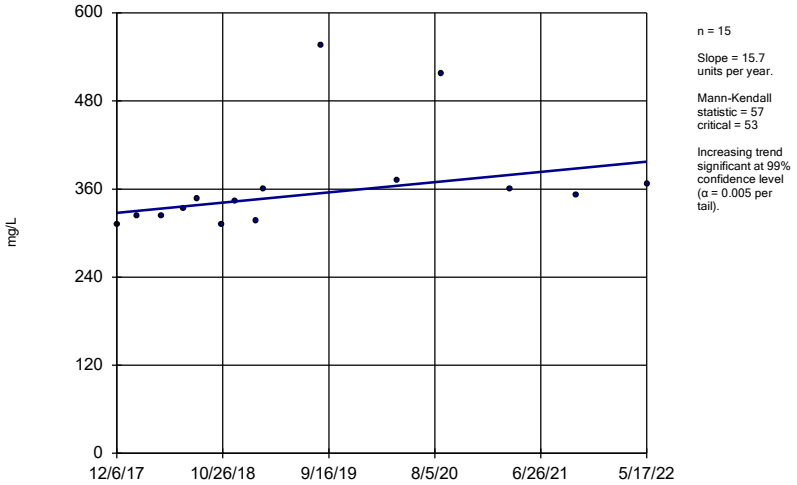
Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-11



n = 15

Slope = 15.7 units per year.

Mann-Kendall statistic = 57 critical = 53

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

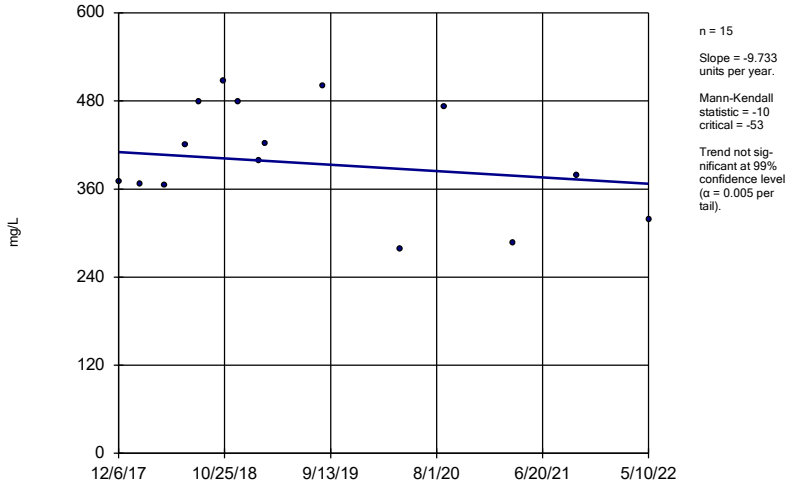
Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-12



n = 15

Slope = -9.733 units per year.

Mann-Kendall statistic = -10 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

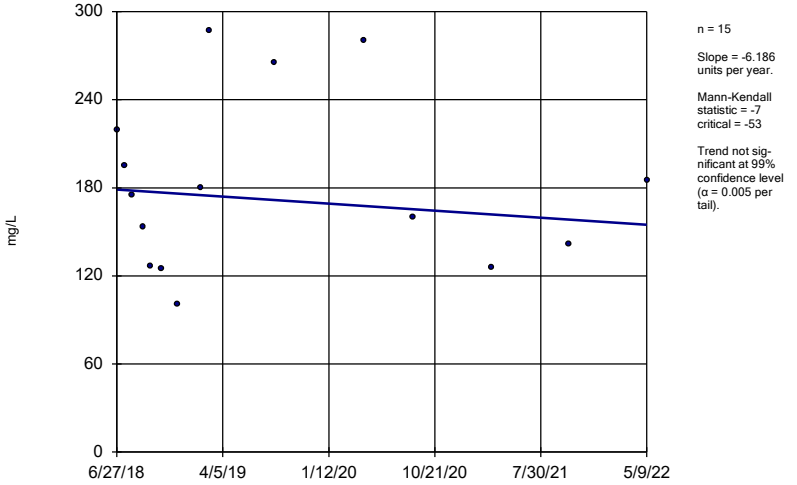
Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-14 (bg)



n = 15

Slope = -6.186 units per year.

Mann-Kendall statistic = -7 critical = -53

Trend not significant at 99% confidence level (α = 0.005 per tail).

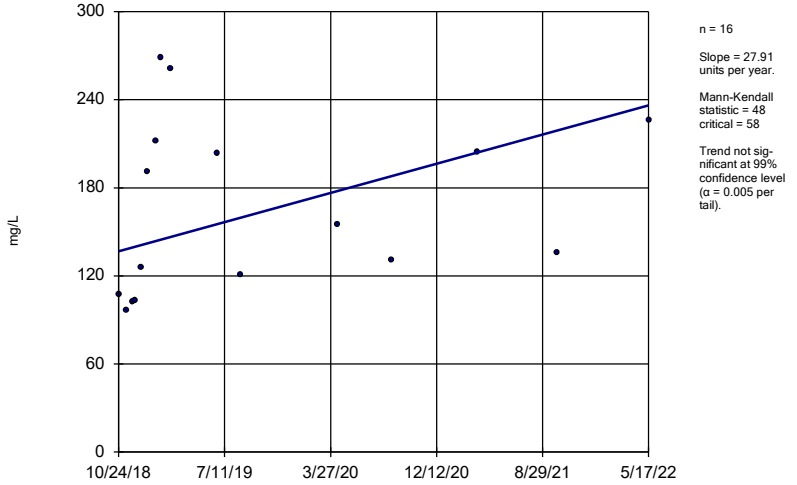
Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-16 (bg)



n = 16

Slope = 27.91 units per year.

Mann-Kendall statistic = 48 critical = 58

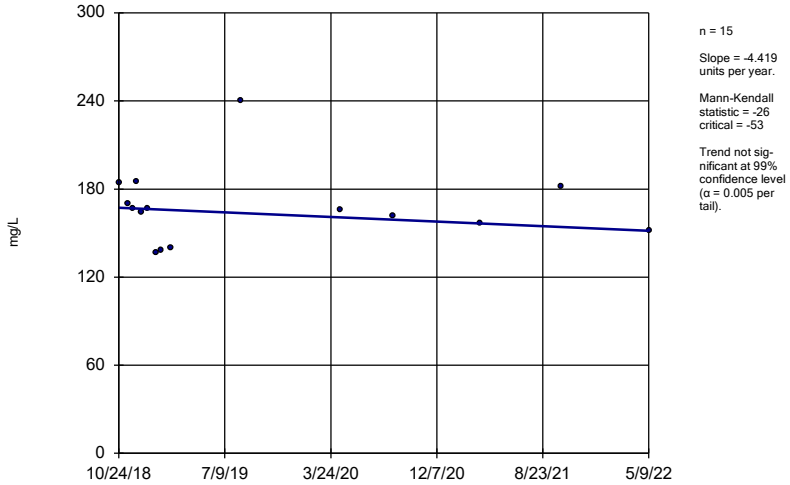
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sen's Slope Estimator

GSD-AP-MW-17 (bg)



n = 15

Slope = -4.419 units per year.

Mann-Kendall statistic = -26
critical = -53

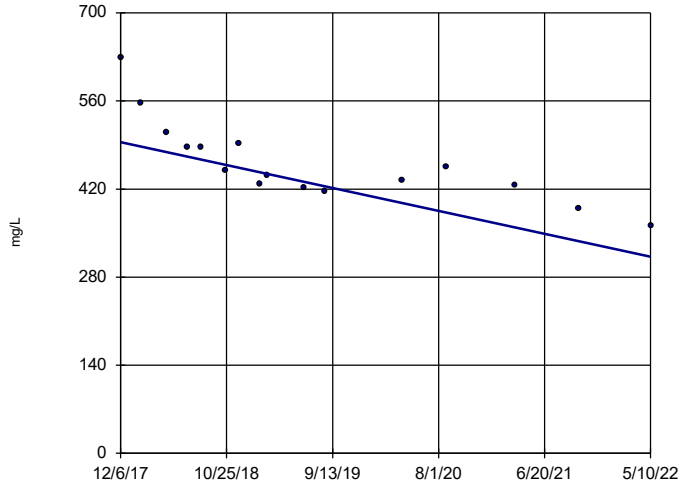
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Sen's Slope Estimator

GSD-AP-MW-3



n = 16

Slope = -41.2 units per year.

Mann-Kendall statistic = -88
critical = -58

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Total Dissolved Solids Analysis Run 7/18/2022 1:53 PM View: Appendix III - Trend Tests
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

FIGURE G.

Upper Tolerance Limits - Appendix IV

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 1/13/2022, 3:11 PM

Constituent	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	%NDs	Transform	Alpha	Method
Antimony (mg/L)	0.00102	n/a	n/a	n/a	n/a	40	97.5	n/a	0.1285	NP Inter
Arsenic (mg/L)	0.00614	n/a	n/a	n/a	n/a	40	42.5	n/a	0.1285	NP Inter
Barium (mg/L)	0.312	n/a	n/a	n/a	n/a	40	0	n/a	0.1285	NP Inter
Beryllium (mg/L)	0.00157	n/a	n/a	n/a	n/a	40	47.5	n/a	0.1285	NP Inter
Cadmium (mg/L)	0.00101	n/a	n/a	n/a	n/a	40	32.5	n/a	0.1285	NP Inter
Chromium (mg/L)	0.01	n/a	n/a	n/a	n/a	40	80	n/a	0.1285	NP Inter
Cobalt (mg/L)	0.056	n/a	n/a	n/a	n/a	40	27.5	n/a	0.1285	NP Inter
Combined Radium 226 + 228 (pCi/L)	2.01	n/a	n/a	n/a	n/a	33	0	n/a	0.184	NP Inter
Fluoride (mg/L)	0.23	n/a	n/a	n/a	n/a	43	34.88	n/a	0.1102	NP Inter
Lead (mg/L)	0.00258	n/a	n/a	n/a	n/a	40	50	n/a	0.1285	NP Inter
Lithium (mg/L)	0.02	n/a	n/a	n/a	n/a	40	77.5	n/a	0.1285	NP Inter
Mercury (mg/L)	0.000775	n/a	n/a	n/a	n/a	39	66.67	n/a	0.1353	NP Inter
Molybdenum (mg/L)	0.00507	n/a	n/a	n/a	n/a	40	75	n/a	0.1285	NP Inter
Selenium (mg/L)	0.0134	n/a	n/a	n/a	n/a	40	55	n/a	0.1285	NP Inter
Thallium (mg/L)	0.0002	n/a	n/a	n/a	n/a	40	100	n/a	0.1285	NP Inter

FIGURE H.

GADSDEN ASH POND GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00102	0.006
Arsenic	mg/L	0.00614	0.01
Barium	mg/L	0.312	2
Beryllium	mg/L	0.00157	0.004
Cadmium	mg/L	0.00108	0.005
Chromium	mg/L	0.01	0.1
Cobalt	mg/L	0.0563	0.0563
Combined Radium-226/228	pCi/L	1.589	5
Fluoride	mg/L	0.2363	4
Lead	mg/L	0.00258	0.015
Lithium	mg/L	0.02	0.04
Mercury	mg/L	0.000775	0.002
Molybdenum	mg/L	0.00507	0.1
Selenium	mg/L	0.0134	0.05
Thallium	mg/L	0.0002	0.002

Notes:

1. mg/L - Milligrams per liter

2. pCi/L - Picocuries per liter

3. The background limits were used as the groundwater protection standard (GWPS) when appropriate under 40 CFR §257.95(h), ADEM Rule 335-13-15-.06(h), and the ADEM Variance.

4. GWPS established during first semi-annual sampling event in 2021.

FIGURE I.

Appendix IV - Confidence Intervals - Significant Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 2:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7782**	**0.4808**	**0.01**	**Yes**	**8**	**0.1403**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01415**	**0.0111**	**0.01**	**Yes**	**8**	**0.001435**	**0**	**No**	**0.01**	**Param.**

Appendix IV - Confidence Intervals - All Results

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 2:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Antimony (mg/L)	GSD-AP-PZ-5	0.00114	0.00102	0.006	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Antimony (mg/L)	GSD-AP-PZ-6	0.00181	0.00102	0.006	No	8	0.0002793	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-1	0.004526	0.002702	0.01	No	8	0.0008606	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-10	0.004175	0.002352	0.01	No	8	0.0008598	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-11	0.002853	0.002474	0.01	No	8	0.0001916	0	x^3	0.01	Param.
Arsenic (mg/L)	**GSD-AP-MW-2**	**0.7782**	**0.4808**	**0.01**	**Yes**	**8**	**0.1403**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-3	0.00021	0.00016	0.01	No	8	0.00001506	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	**GSD-AP-MW-4**	**0.01415**	**0.0111**	**0.01**	**Yes**	**8**	**0.001435**	**0**	**No**	**0.01**	**Param.**
Arsenic (mg/L)	GSD-AP-MW-5	0.0002	0.00008	0.01	No	8	0.00005531	62.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-7	0.0002	0.00007	0.01	No	8	0.00004596	87.5	No	0.004	NP (NDs)
Arsenic (mg/L)	GSD-AP-MW-8	0.003246	0.002869	0.01	No	8	0.0001777	0	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-MW-9	0.0009783	0.0001992	0.01	No	8	0.0003929	37.5	No	0.01	Param.
Arsenic (mg/L)	GSD-AP-PZ-2	0.0002	0.0000826	0.01	No	5	0.00006009	40	No	0.031	NP (normality)
Arsenic (mg/L)	GSD-AP-PZ-5	0.0002	0.0000808	0.01	No	8	0.00004214	87.5	No	0.004	NP (NDs)
Barium (mg/L)	GSD-AP-MW-1	0.04168	0.02932	2	No	8	0.005829	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-10	0.3604	0.2768	2	No	8	0.03942	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-11	0.331	0.165	2	No	8	0.06289	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-MW-12	0.04863	0.03134	2	No	8	0.008156	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-2	0.08753	0.05167	2	No	8	0.01691	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-3	0.03892	0.03193	2	No	8	0.003295	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-4	0.2151	0.1644	2	No	8	0.02395	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-5	0.2439	0.2189	2	No	8	0.01177	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-6	0.07677	0.06023	2	No	8	0.007799	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-7	0.08639	0.05768	2	No	8	0.01354	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-8	0.2805	0.189	2	No	8	0.04318	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-MW-9	0.1947	0.1425	2	No	8	0.02465	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-1	0.08592	0.05158	2	No	8	0.0162	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-2	0.1498	0.02519	2	No	5	0.03718	0	No	0.01	Param.
Barium (mg/L)	GSD-AP-PZ-5	0.126	0.0494	2	No	8	0.02643	0	No	0.004	NP (normality)
Barium (mg/L)	GSD-AP-PZ-6	0.03128	0.02897	2	No	8	0.001093	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-1	0.00022	0.0001	0.005	No	8	0.00004787	62.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-12	0.0006833	0.0003534	0.005	No	8	0.0001556	0	No	0.01	Param.
Cadmium (mg/L)	GSD-AP-MW-2	0.0002	0.0000688	0.005	No	8	0.00004639	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-3	0.000438	0.0002	0.005	No	8	0.0001015	50	No	0.004	NP (normality)
Cadmium (mg/L)	GSD-AP-MW-7	0.0002	0.000097	0.005	No	8	0.00003642	87.5	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-MW-8	0.0002	0.00007	0.005	No	8	0.00005723	75	No	0.004	NP (NDs)
Cadmium (mg/L)	GSD-AP-PZ-5	0.0002	0.00008	0.005	No	8	0.00004243	87.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-1	0.00102	0.00023	0.1	No	8	0.0003826	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-10	0.00102	0.00028	0.1	No	8	0.000368	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-11	0.00102	0.00027	0.1	No	8	0.0003337	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-12	0.00102	0.00034	0.1	No	8	0.0003252	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-2	0.00102	0.00034	0.1	No	8	0.0003082	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-3	0.001043	0.0001046	0.1	No	8	0.0008462	50	x^(1/3)	0.01	Param.
Chromium (mg/L)	GSD-AP-MW-4	0.00102	0.00023	0.1	No	8	0.0003451	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-5	0.00102	0.00028	0.1	No	8	0.0003266	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-6	0.00102	0.00025	0.1	No	8	0.0003369	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-7	0.00102	0.00025	0.1	No	8	0.0003747	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-8	0.00102	0.00022	0.1	No	8	0.0003525	75	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-MW-9	0.00102	0.00021	0.1	No	8	0.0003698	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-1	0.00102	0.00027	0.1	No	8	0.0003477	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-2	0.0008656	0.0002904	0.1	No	5	0.0002841	40	No	0.01	Param.
Chromium (mg/L)	GSD-AP-PZ-5	0.00102	0.00034	0.1	No	8	0.0003182	62.5	No	0.004	NP (NDs)
Chromium (mg/L)	GSD-AP-PZ-6	0.00102	0.00031	0.1	No	8	0.0003244	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-1	0.02359	0.01471	0.0563	No	8	0.004189	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-10	0.00091	0.000203	0.0563	No	8	0.0003151	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-11	0.00756	0.000203	0.0563	No	8	0.003035	37.5	No	0.004	NP (normality)
Cobalt (mg/L)	GSD-AP-MW-12	0.005797	0.003758	0.0563	No	8	0.000962	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-2	0.03796	0.02327	0.0563	No	8	0.00693	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-3	0.02507	0.01598	0.0563	No	8	0.00429	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-4	0.02842	0.02313	0.0563	No	8	0.0025	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-5	0.002389	0.0007644	0.0563	No	8	0.0007663	12.5	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-6	0.00114	0.000203	0.0563	No	8	0.0004483	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-7	0.00102	0.00018	0.0563	No	8	0.0002889	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-MW-8	0.004393	0.001575	0.0563	No	8	0.00133	12.5	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-MW-9	0.00113	0.000203	0.0563	No	8	0.0004286	62.5	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-1	0.00044	0.00014	0.0563	No	8	0.00008972	75	No	0.004	NP (NDs)
Cobalt (mg/L)	GSD-AP-PZ-2	0.007972	0.001308	0.0563	No	5	0.001988	0	No	0.01	Param.
Cobalt (mg/L)	GSD-AP-PZ-5	0.00227	0.00008	0.0563	No	8	0.0009556	37.5	No	0.004	NP (normality)

Appendix IV - Confidence Intervals - All Results

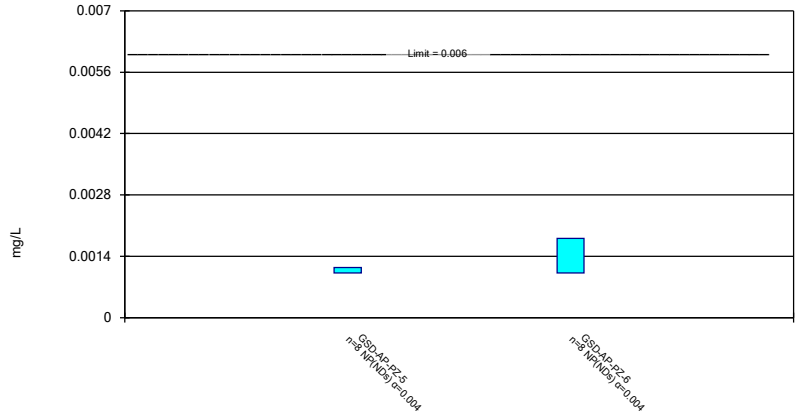
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR Printed 7/18/2022, 2:07 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Std. Dev.	%NDs	Transform	Alpha	Method
Cobalt (mg/L)	GSD-AP-PZ-6	0.000203	0.000108	0.0563	No	8	0.00004246	62.5	No	0.004	NP (NDs)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-1	0.9521	0.3544	5	No	8	0.282	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-10	2.767	0.005055	5	No	8	2.167	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-11	1.258	0.74	5	No	8	0.2445	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-12	1.193	0.09446	5	No	8	0.518	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-2	1.555	0.3002	5	No	8	0.671	0	sqrt(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-3	1.44	0.177	5	No	8	1.01	0	ln(x)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-4	1.268	0.1187	5	No	8	0.542	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-5	1.268	0.3851	5	No	8	0.4167	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-6	1.089	0.0003213	5	No	8	0.4481	0	x^(1/3)	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-7	0.9135	0.0677	5	No	8	0.399	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-8	0.7344	0.3189	5	No	8	0.196	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-MW-9	1.163	0.1377	5	No	8	0.4837	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-1	2.07	-0.129	5	No	8	0.6841	0	No	0.004	NP (normality)
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-2	1.257	-0.1743	5	No	5	0.4271	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-5	0.8052	0.2014	5	No	8	0.2848	0	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	GSD-AP-PZ-6	1.157	0.003799	5	No	8	0.4972	0	x^(1/3)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-1	0.125	0.0525	4	No	8	0.03187	75	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-10	0.201	0.0813	4	No	8	0.03838	0	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-11	0.1109	0.06956	4	No	8	0.02477	37.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-12	0.125	0.125	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-2	0.2798	0.207	4	No	8	0.03433	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-3	0.125	0.0592	4	No	8	0.03088	62.5	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-4	0.2572	0.1933	4	No	8	0.03018	0	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-5	0.122	0.0567	4	No	8	0.02127	0	No	0.004	NP (normality)
Fluoride (mg/L)	GSD-AP-MW-6	0.125	0.0581	4	No	8	0.02629	75	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-MW-7	0.08819	0.06546	4	No	8	0.02657	37.5	sqrt(x)	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-8	0.1167	0.06539	4	No	8	0.02418	12.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-MW-9	0.1457	0.1094	4	No	8	0.01712	12.5	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-1	0.1066	0.07809	4	No	8	0.01959	25	No	0.01	Param.
Fluoride (mg/L)	GSD-AP-PZ-5	0.125	0.125	4	No	8	0	100	No	0.004	NP (NDs)
Fluoride (mg/L)	GSD-AP-PZ-6	0.125	0.125	4	No	8	0	100	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-MW-2	0.0002	0.00009	0.015	No	8	0.00003889	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-2	0.000205	0.0001023	0.015	No	5	0.00003356	40	x^3	0.01	Param.
Lead (mg/L)	GSD-AP-PZ-5	0.0002	0.00013	0.015	No	8	0.00002475	87.5	No	0.004	NP (NDs)
Lead (mg/L)	GSD-AP-PZ-6	0.0002	0.0000835	0.015	No	8	0.00004901	62.5	No	0.004	NP (NDs)
Lithium (mg/L)	GSD-AP-MW-2	0.05393	0.02687	0.04	No	8	0.01276	0	No	0.01	Param.
Mercury (mg/L)	GSD-AP-MW-10	0.0005	0.000302	0.002	No	8	0.00007	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-7	0.0005	0.00034	0.002	No	8	0.00005657	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-MW-8	0.0005	0.000284	0.002	No	8	0.00007637	87.5	No	0.004	NP (NDs)
Mercury (mg/L)	GSD-AP-PZ-6	0.00286	0.0005	0.002	No	8	0.0008344	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-10	0.00047	0.0002	0.1	No	8	0.0001202	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-11	0.0002	0.00012	0.1	No	8	0.00003659	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-2	0.02562	0.01498	0.1	No	8	0.005021	0	No	0.01	Param.
Molybdenum (mg/L)	GSD-AP-MW-4	0.00122	0.0002	0.1	No	8	0.0005029	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-5	0.0002	0.00011	0.1	No	8	0.00003412	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-7	0.0002	0.0001	0.1	No	8	0.00003536	87.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-8	0.0004	0.0002	0.1	No	8	0.00008503	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-MW-9	0.00027	0.00018	0.1	No	8	0.000029	62.5	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-1	0.0002	0.00007	0.1	No	8	0.00005406	75	No	0.004	NP (NDs)
Molybdenum (mg/L)	GSD-AP-PZ-2	0.00028	0.0002	0.1	No	5	0.00003578	80	No	0.031	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-1	0.0002	0.000112	0.002	No	8	0.00003688	75	No	0.004	NP (NDs)
Thallium (mg/L)	GSD-AP-MW-2	0.000384	0.0002442	0.002	No	8	0.00006596	12.5	No	0.01	Param.
Thallium (mg/L)	GSD-AP-MW-3	0.0002	0.00011	0.002	No	8	0.00004033	62.5	No	0.004	NP (NDs)

Sanitas™ v.9.6.35 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

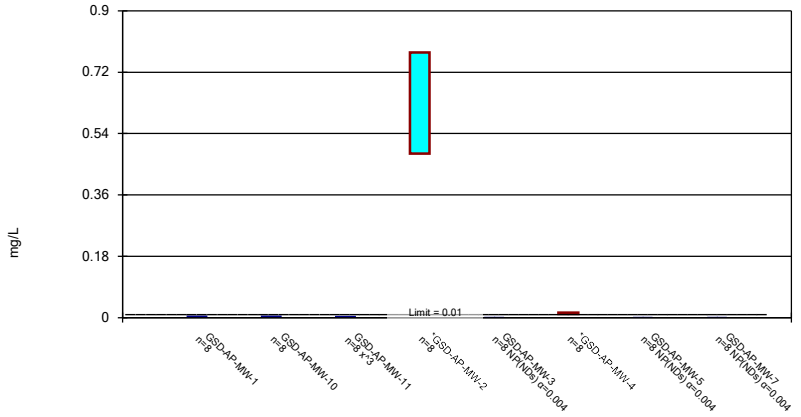


Constituent: Antimony Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance limit is exceeded.* Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

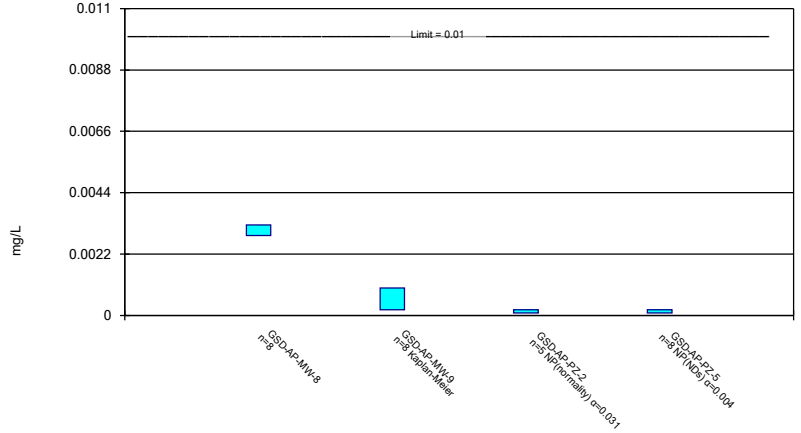


Constituent: Arsenic Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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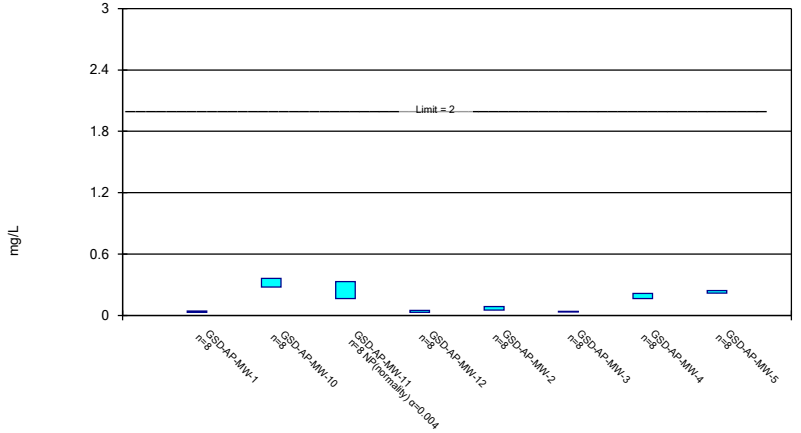

Constituent: Barium Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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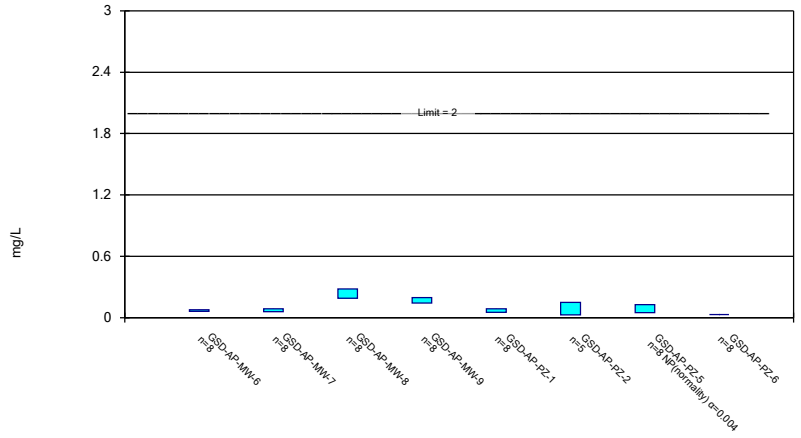

Constituent: Barium Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

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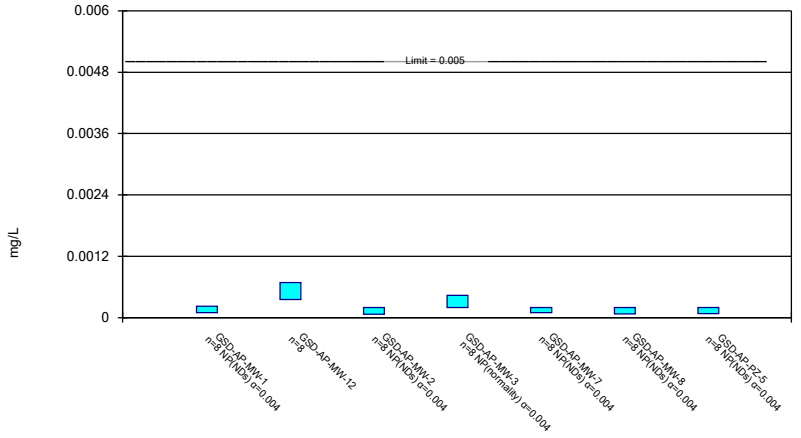
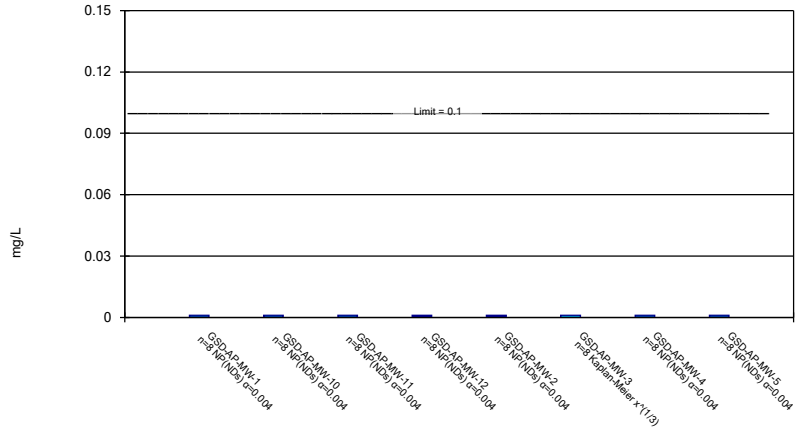


Constituent: Cadmium Analysis Run 7/18/2022 2:05 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

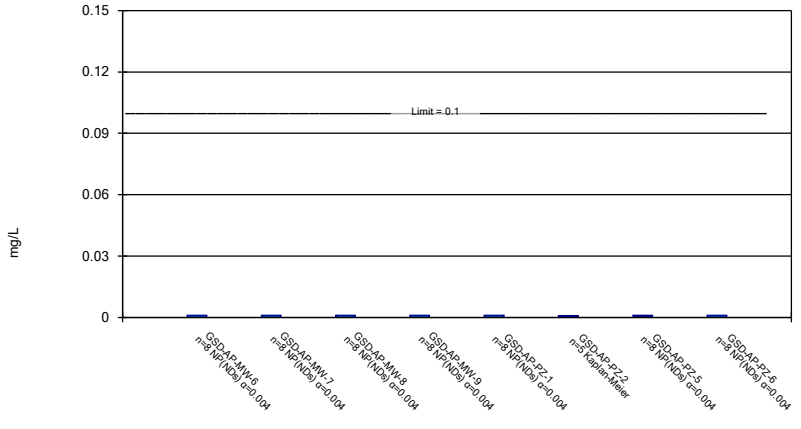


Constituent: Chromium Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

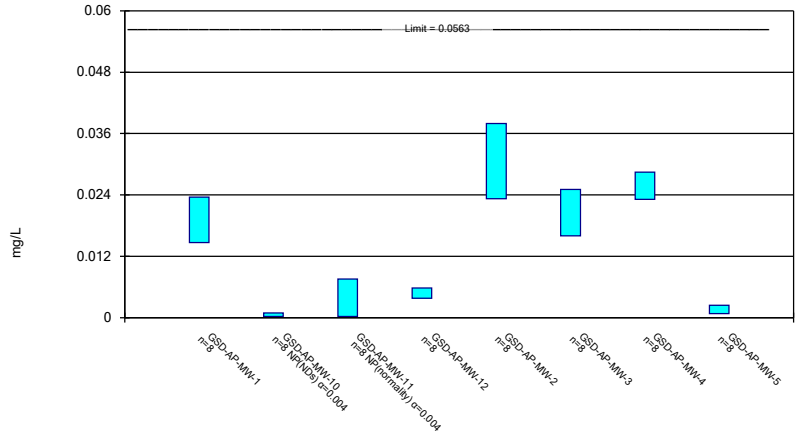


Constituent: Chromium Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

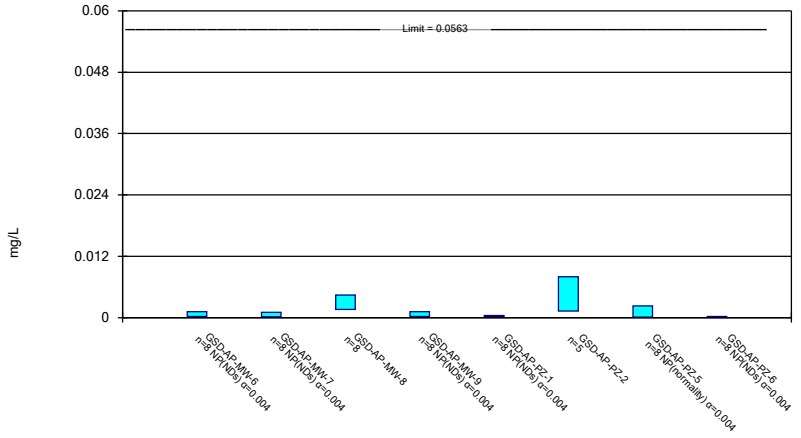


Constituent: Cobalt Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

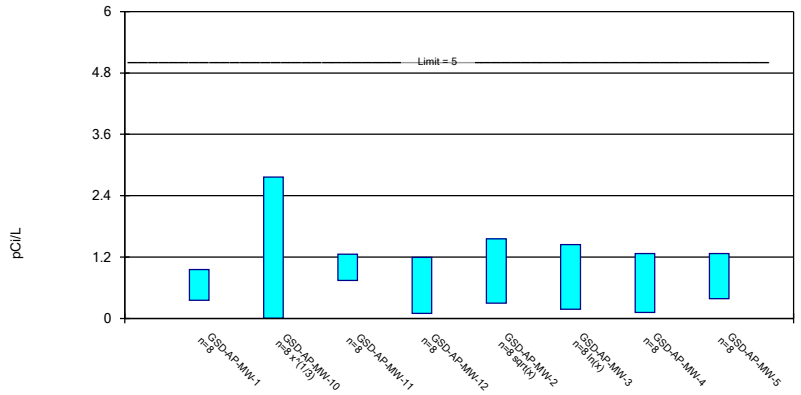


Constituent: Cobalt Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

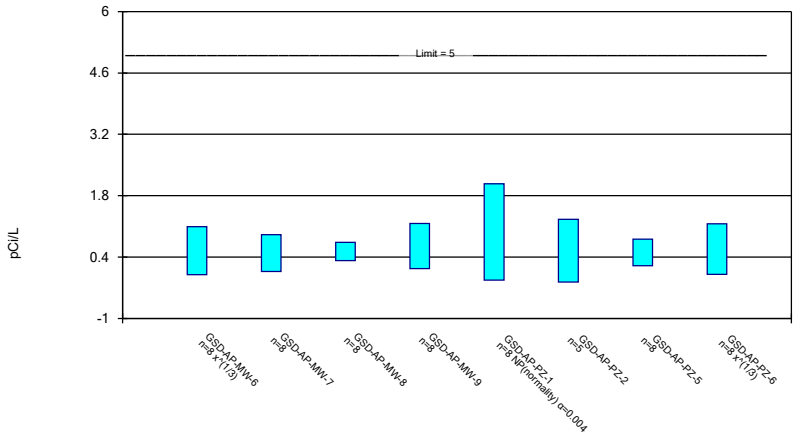


Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

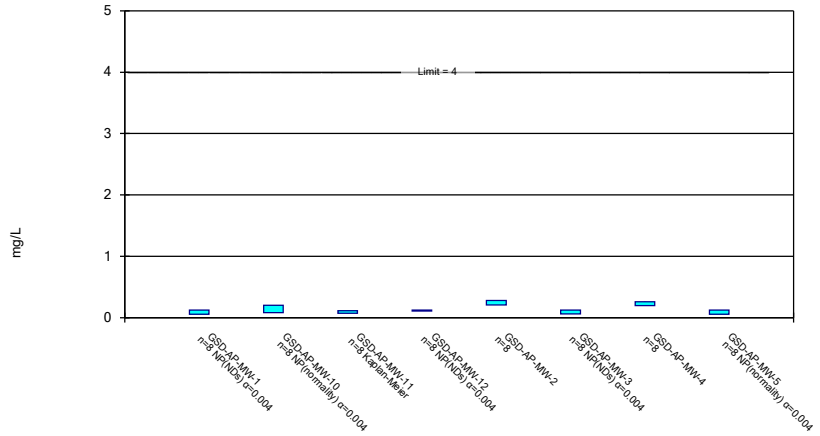
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

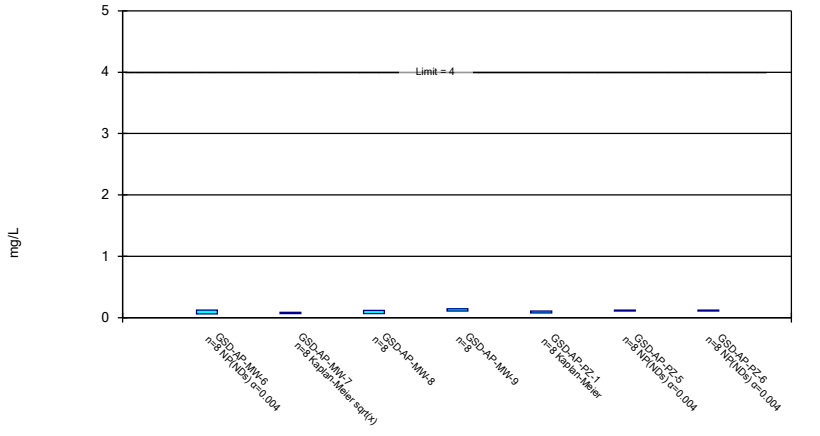


Constituent: Fluoride Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

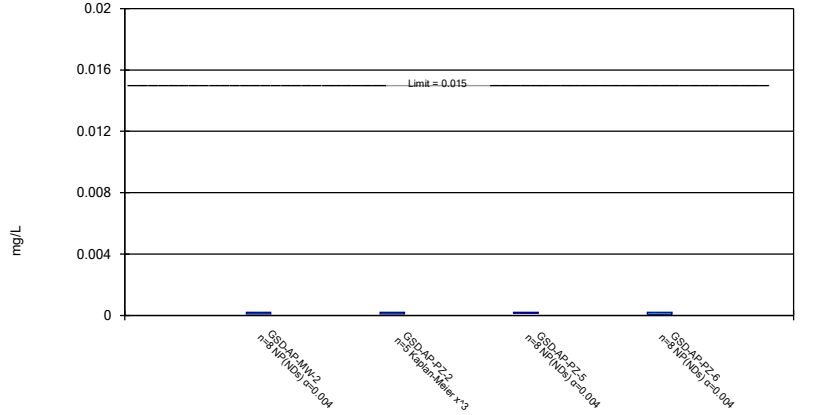


Constituent: Fluoride Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.

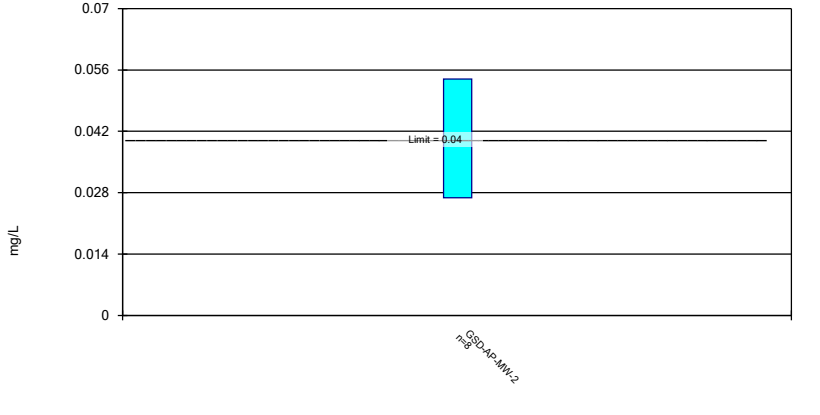


Constituent: Lead Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.

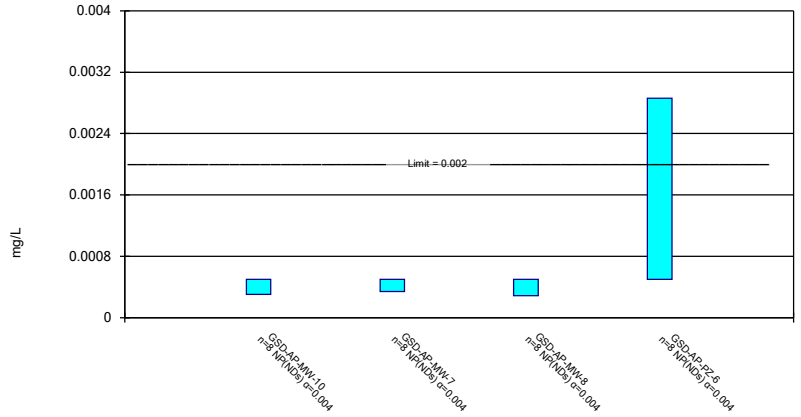


Constituent: Lithium Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.

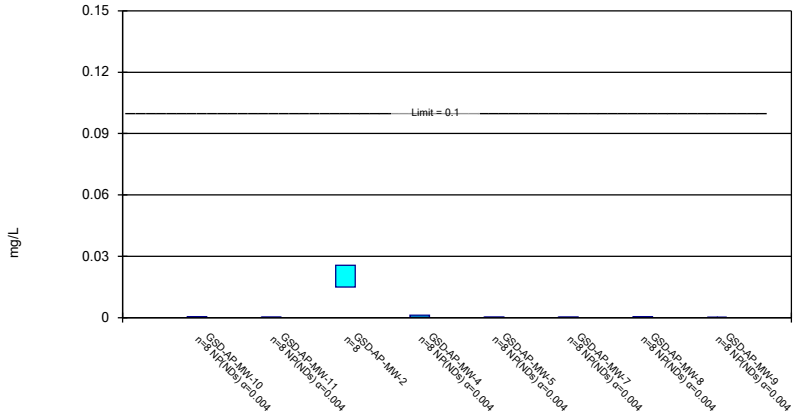


Constituent: Mercury Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Molybdenum Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Non-Parametric Confidence Interval

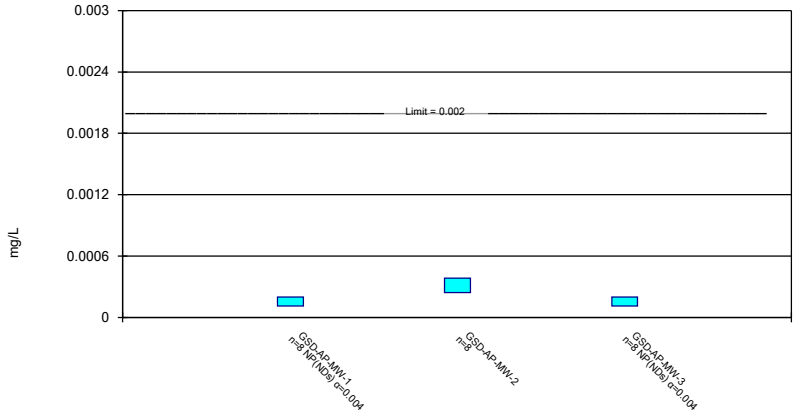
Compliance Limit is not exceeded.

Constituent: Molybdenum Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Sanitas™ v.9.6.35 . UG

Parametric and Non-Parametric (NP) Confidence Interval

Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Thallium Analysis Run 7/18/2022 2:06 PM View: Confidence Intervals
Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

Confidence Interval

Constituent: Antimony (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-5	GSD-AP-PZ-6
12/3/2018	<0.00102	<0.00102
2/7/2019	0.00114 (J)	0.00181 (J)
8/21/2019	<0.00102	<0.00102
4/15/2020	<0.00102	<0.00102
8/24/2020	<0.00102	<0.00102
3/16/2021	<0.00102	<0.00102
10/12/2021	<0.00102	<0.00102
5/10/2022	<0.00102	<0.00102
Mean	0.001035	0.001119
Std. Dev.	4.243E-05	0.0002793
Upper Lim.	0.00114	0.00181
Lower Lim.	0.00102	0.00102

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-7
12/3/2018						0.0119		
12/4/2018	0.00471 (J)	0.00332 (J)	0.00271 (J)	0.553				<0.0002
12/5/2018							<0.0002	
2/5/2019	0.00365 (J)			0.74	<0.0002	0.0107	<0.0002	
2/6/2019		0.00333 (J)	0.00272 (J)					<0.0002
6/18/2019					<0.0002			
8/20/2019				0.825	<0.0002	0.0141	<0.0002	
8/21/2019	0.00444 (J)							<0.0002
8/22/2019		0.00394 (J)	0.00229 (J)					
4/13/2020					<0.0002		<0.0002	
4/14/2020			0.00286 (J)					
4/15/2020	0.00309 (J)	0.00236 (J)		0.709		0.0121		<0.0002
8/24/2020							<0.0002	
8/25/2020	0.00435 (J)			0.727				
8/26/2020		0.00422 (J)	0.00246 (J)		<0.0002	0.0133		<0.0002
3/16/2021	0.0029						8.17E-05 (J)	
3/22/2021					0.0002 (J)			
3/23/2021		0.00163	0.00275					<0.0002
3/24/2021				0.489		0.011		
10/5/2021	0.00356				0.00021	0.0147	0.00013 (J)	7E-05 (J)
10/11/2021		0.0037		0.424				
10/12/2021			0.00272					
5/9/2022							8E-05 (J)	
5/10/2022	0.00221	0.00361			0.00016 (J)			<0.0002
5/16/2022				0.569		0.0132		
5/17/2022			0.00281					
Mean	0.003614	0.003264	0.002665	0.6295	0.0001962	0.01263	0.0001615	0.0001837
Std. Dev.	0.0008606	0.0008598	0.0001916	0.1403	1.506E-05	0.001435	5.531E-05	4.596E-05
Upper Lim.	0.004526	0.004175	0.002853	0.7782	0.00021	0.01415	0.0002	0.0002
Lower Lim.	0.002702	0.002352	0.002474	0.4808	0.00016	0.0111	8E-05	7E-05

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-2	GSD-AP-PZ-5
12/3/2018				<0.0002
12/4/2018	0.00328 (J)			
12/5/2018		0.00111 (J)		
2/6/2019	0.00325 (J)	<0.0002		
2/7/2019				<0.0002
8/21/2019	0.00302 (J)	<0.0002		<0.0002
4/13/2020			<0.0002	
4/14/2020	0.00295 (J)	0.00118 (J)		
4/15/2020				<0.0002
8/24/2020			<0.0002	<0.0002
8/26/2020	0.00304 (J)	<0.0002		
3/16/2021				8.08E-05 (J)
3/17/2021			8.26E-05 (J)	
3/23/2021	0.00282	0.00063		
10/5/2021			9E-05 (J)	
10/12/2021	0.00287	0.00064		<0.0002
5/9/2022			0.0001 (J)	
5/10/2022				<0.0002
5/11/2022	0.00323	0.00055		
Mean	0.003058	0.0005887	0.0001345	0.0001851
Std. Dev.	0.0001777	0.0003929	6.009E-05	4.214E-05
Upper Lim.	0.003246	0.0009783	0.0002	0.0002
Lower Lim.	0.002869	0.0001992	8.26E-05	8.08E-05

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
12/3/2018							0.214	
12/4/2018	0.0434	0.305	0.331		0.0589			
12/5/2018				0.0493				0.245
2/5/2019	0.0439				0.0418	0.0363	0.173	0.215
2/6/2019		0.265	0.286	0.036				
6/18/2019						0.0369		
8/20/2019					0.0685	0.0405	0.188	0.238
8/21/2019	0.037							
8/22/2019		0.302	0.214	0.0455				
4/13/2020						0.0349		0.241
4/14/2020			0.168	0.0279				
4/15/2020	0.0329	0.35			0.0607		0.159	
8/24/2020								0.238
8/25/2020	0.0358				0.0812			
8/26/2020		0.322	0.165	0.0503		0.0363	0.181	
3/16/2021	0.0331							0.217
3/22/2021						0.0354		
3/23/2021		0.395	0.169	0.0315				
3/24/2021					0.0676		0.171	
10/5/2021	0.0304			0.0417		0.0344	0.202	0.221
10/11/2021		0.292			0.0807			
10/12/2021			0.17					
5/9/2022								0.236
5/10/2022	0.0275	0.318		0.0377		0.0287		
5/16/2022					0.0974		0.23	
5/17/2022			0.195					
Mean	0.0355	0.3186	0.2123	0.03999	0.0696	0.03543	0.1898	0.2314
Std. Dev.	0.005829	0.03942	0.06289	0.008156	0.01691	0.003295	0.02395	0.01177
Upper Lim.	0.04168	0.3604	0.331	0.04863	0.08753	0.03892	0.2151	0.2439
Lower Lim.	0.02932	0.2768	0.165	0.03134	0.05167	0.03193	0.1644	0.2189

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/3/2018	0.0633				0.0784		0.126	0.0307
12/4/2018		0.0789	0.189					
12/5/2018				0.186				
2/5/2019	0.0551				0.0578			
2/6/2019		0.0685	0.226	0.128				
2/7/2019							0.0602	0.028
8/20/2019	0.0731				0.097			
8/21/2019		0.0946	0.194	0.183			0.085	0.0312
4/13/2020	0.0635				0.0529	0.0832		
4/14/2020			0.262	0.186				
4/15/2020		0.0653					0.0535	0.0296
8/24/2020					0.0733	0.132	0.0565	0.031
8/26/2020	0.0771	0.0845	0.235	0.202				
3/16/2021							0.0553	0.0293
3/17/2021	0.0656					0.045		
3/23/2021		0.0602	0.249	0.157				
3/24/2021					0.0525			
10/5/2021	0.0741	0.0716			0.0811	0.118		
10/12/2021			0.203	0.147			0.0494	0.0303
5/9/2022					0.057	0.0593		
5/10/2022	0.0762	0.0527					0.0497	0.0309
5/11/2022			0.32	0.16				
Mean	0.0685	0.07204	0.2348	0.1686	0.06875	0.0875	0.06695	0.03013
Std. Dev.	0.007799	0.01354	0.04318	0.02465	0.0162	0.03718	0.02643	0.001093
Upper Lim.	0.07677	0.08639	0.2805	0.1947	0.08592	0.1498	0.126	0.03128
Lower Lim.	0.06023	0.05768	0.189	0.1425	0.05158	0.02519	0.0494	0.02897

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-PZ-5
12/3/2018							<0.0002
12/4/2018	<0.0002		<0.0002		<0.0002	<0.0002	
12/5/2018		0.000661 (J)					
2/5/2019	<0.0002		<0.0002	<0.0002			
2/6/2019		0.000583 (J)			<0.0002	<0.0002	
2/7/2019							<0.0002
6/18/2019				<0.0002			
8/20/2019			<0.0002	<0.0002			
8/21/2019	<0.0002				<0.0002	<0.0002	<0.0002
8/22/2019		0.000755 (J)					
4/13/2020				0.000438 (J)			
4/14/2020		0.000425 (J)				<0.0002	
4/15/2020	<0.0002		<0.0002		<0.0002		<0.0002
8/24/2020							<0.0002
8/25/2020	<0.0002		<0.0002				
8/26/2020		0.000618 (J)		<0.0002	<0.0002	<0.0002	
3/16/2021	0.000102 (J)						<0.0002
3/22/2021				0.00039			
3/23/2021		0.000405			9.7E-05 (J)	8.32E-05 (J)	
3/24/2021			6.88E-05 (J)				
10/5/2021	0.0001 (J)	0.00037		0.00021	<0.0002		
10/11/2021			<0.0002				
10/12/2021						<0.0002	8E-05 (J)
5/10/2022	0.00022	0.00033		0.00035	<0.0002		<0.0002
5/11/2022						7E-05 (J)	
5/16/2022			<0.0002				
Mean	0.0001777	0.0005184	0.0001836	0.0002735	0.0001871	0.0001691	0.000185
Std. Dev.	4.787E-05	0.0001556	4.639E-05	0.0001015	3.642E-05	5.723E-05	4.243E-05
Upper Lim.	0.00022	0.0006833	0.0002	0.000438	0.0002	0.0002	0.0002
Lower Lim.	0.0001	0.0003534	6.88E-05	0.0002	9.7E-05	7E-05	8E-05

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
12/3/2018							<0.00102	
12/4/2018	<0.00102	<0.00102	<0.00102		<0.00102			
12/5/2018				<0.00102				<0.00102
2/5/2019	<0.00102				<0.00102	<0.00102	<0.00102	<0.00102
2/6/2019		<0.00102	<0.00102	<0.00102				
6/18/2019						0.00285 (J)		
8/20/2019					<0.00102	<0.00102	<0.00102	<0.00102
8/21/2019	<0.00102							
8/22/2019		<0.00102	<0.00102	<0.00102				
4/13/2020						<0.00102		<0.00102
4/14/2020			<0.00102	<0.00102				
4/15/2020	<0.00102	<0.00102			<0.00102		<0.00102	
8/24/2020								<0.00102
8/25/2020	<0.00102				<0.00102			
8/26/2020		<0.00102	<0.00102	<0.00102		<0.00102	<0.00102	
3/16/2021	0.000376 (J)							0.000397 (J)
3/22/2021						0.000293 (J)		
3/23/2021		0.00035 (J)	0.000513 (J)	0.000431 (J)				
3/24/2021					0.00047 (J)		0.000323 (J)	
10/5/2021	0.00023 (J)			0.00034 (J)		0.00023 (J)	<0.00102	0.00028 (J)
10/11/2021		0.00028 (J)			0.00048 (J)			
10/12/2021			0.00027 (J)					
5/9/2022								0.00053 (J)
5/10/2022	0.00025 (J)	0.0003 (J)		0.00041 (J)		0.00029 (J)		
5/16/2022					0.00034 (J)		0.00023 (J)	
5/17/2022			0.00038 (J)					
Mean	0.0007445	0.0007537	0.0007829	0.0007851	0.0007987	0.0009679	0.0008341	0.0007884
Std. Dev.	0.0003826	0.000368	0.0003337	0.0003252	0.0003082	0.0008462	0.0003451	0.0003266
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00102	0.001043	0.00102	0.00102
Lower Lim.	0.00023	0.00028	0.00027	0.00034	0.00034	0.0001046	0.00023	0.00028

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/3/2018	<0.00102				<0.00102		<0.00102	<0.00102
12/4/2018		<0.00102	<0.00102					
12/5/2018				<0.00102				
2/5/2019	<0.00102				<0.00102			
2/6/2019		<0.00102	<0.00102	<0.00102				
2/7/2019							<0.00102	<0.00102
8/20/2019	<0.00102				<0.00102			
8/21/2019		<0.00102	<0.00102	<0.00102			<0.00102	<0.00102
4/13/2020	<0.00102				<0.00102	<0.00102		
4/14/2020			<0.00102	<0.00102				
4/15/2020		<0.00102					<0.00102	<0.00102
8/24/2020					<0.00102	<0.00102	<0.00102	<0.00102
8/26/2020	<0.00102	<0.00102	<0.00102	<0.00102				
3/16/2021							0.000534 (J)	0.000534 (J)
3/17/2021	0.000338 (J)					0.000764 (J)		
3/23/2021		0.000406 (J)	0.0003 (J)	0.000422 (J)				
3/24/2021					0.000442 (J)			
10/5/2021	0.00025 (J)	0.00025 (J)			0.00035 (J)	0.00035 (J)		
10/12/2021			<0.00102	0.00031 (J)			0.00034 (J)	0.00031 (J)
5/9/2022					0.00027 (J)	0.00062 (J)		
5/10/2022	<0.00102	0.00025 (J)					0.00037 (J)	0.00037 (J)
5/11/2022			0.00022 (J)	0.00021 (J)				
Mean	0.0008385	0.0007507	0.00083	0.0007552	0.0007702	0.0007548	0.000793	0.0007892
Std. Dev.	0.0003369	0.0003747	0.0003525	0.0003698	0.0003477	0.0002841	0.0003182	0.0003244
Upper Lim.	0.00102	0.00102	0.00102	0.00102	0.00102	0.0008656	0.00102	0.00102
Lower Lim.	0.00025	0.00025	0.00022	0.00021	0.00027	0.0002904	0.00034	0.00031

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
12/3/2018							0.0228	
12/4/2018	0.0166	<0.000203	<0.000203		0.0252			
12/5/2018				0.00466 (J)				0.00233 (J)
2/5/2019	0.0264				0.0362	0.0232	0.0263	0.0021 (J)
2/6/2019		<0.000203	<0.000203	0.00485 (J)				
6/18/2019						0.0263		
8/20/2019					0.0366	0.0257	0.0293	0.00223 (J)
8/21/2019	0.0242							
8/22/2019		<0.000203	0.00756	0.00658				
4/13/2020						0.0209		<0.000203
4/14/2020			<0.000203	0.0035 (J)				
4/15/2020	0.0178	<0.000203			0.0324		0.0252	
8/24/2020								0.00222 (J)
8/25/2020	0.0193				0.0298			
8/26/2020		<0.000203	0.00599	0.00547		0.0191	0.0231	
3/16/2021	0.0184							0.00136
3/22/2021						0.0183		
3/23/2021		0.00037	0.000388	0.00378				
3/24/2021					0.0316		0.0268	
10/5/2021	0.0169			0.00448		0.016	0.0238	0.00116
10/11/2021		0.00089			0.0165			
10/12/2021			0.00027					
5/9/2022								0.00101
5/10/2022	0.0136	0.00091		0.0049		0.0147		
5/16/2022					0.0366		0.0289	
5/17/2022			0.00044					
Mean	0.01915	0.0003981	0.001907	0.004778	0.03061	0.02053	0.02578	0.001577
Std. Dev.	0.004189	0.0003151	0.003035	0.000962	0.00693	0.00429	0.0025	0.0007663
Upper Lim.	0.02359	0.00091	0.00756	0.005797	0.03796	0.02507	0.02842	0.002389
Lower Lim.	0.01471	0.000203	0.000203	0.003758	0.02327	0.01598	0.02313	0.0007644

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/3/2018	<0.000203				<0.000203		0.00227 (J)	<0.000203
12/4/2018		<0.000203	<0.000203					
12/5/2018				<0.000203				
2/5/2019	<0.000203				<0.000203			
2/6/2019		<0.000203	0.00232 (J)	<0.000203				
2/7/2019							<0.000203	<0.000203
8/20/2019	<0.000203				<0.000203			
8/21/2019		<0.000203	0.00303 (J)	<0.000203			0.00225 (J)	<0.000203
4/13/2020	<0.000203				<0.000203	0.00489 (J)		
4/14/2020			0.00385 (J)	<0.000203				
4/15/2020		<0.000203					<0.000203	<0.000203
8/24/2020					<0.000203	0.00237 (J)	<0.000203	<0.000203
8/26/2020	<0.000203	<0.000203	0.00388 (J)	<0.000203				
3/16/2021							0.000384	0.000108 (J)
3/17/2021	0.00102					0.00616		
3/23/2021		0.00102	0.003	0.00103				
3/24/2021					<0.000203			
10/5/2021	0.00104	0.00018 (J)			0.00044	0.00287		
10/12/2021			0.00298	0.00113			8E-05 (J)	0.00014 (J)
5/9/2022					0.00014 (J)	0.00691		
5/10/2022	0.00114	0.0004					0.00015 (J)	0.00012 (J)
5/11/2022			0.00461	0.00091				
Mean	0.0005269	0.0003269	0.002984	0.0005106	0.0002248	0.00464	0.0007179	0.0001729
Std. Dev.	0.0004483	0.0002889	0.00133	0.0004286	8.972E-05	0.001988	0.0009556	4.246E-05
Upper Lim.	0.00114	0.00102	0.004393	0.00113	0.00044	0.007972	0.00227	0.000203
Lower Lim.	0.000203	0.00018	0.001575	0.000203	0.00014	0.001308	8E-05	0.000108

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
12/3/2018						0.749	0.697	
12/4/2018	0.213 (U)	0.407 (U)	1.05		0.739			
12/5/2018				0.498 (U)				0.876
2/5/2019	0.637				1.09	0.299 (U)	0.467 (U)	0.551 (U)
2/6/2019		0.537	0.779	-0.0241 (U)				
8/20/2019					0.553 (U)	0.709 (U)	0.814	0.206 (U)
8/21/2019	0.643 (U)							
8/22/2019		-0.021 (U)	1.34 (U)	0.145 (U)				
4/13/2020						0.942 (U)		1.19
4/14/2020			0.922 (U)	0.643 (U)				
4/15/2020	0.538 (U)	0.64 (U)			0.182 (U)		-0.0841 (U)	
8/24/2020								0.482 (U)
8/25/2020	0.502 (U)				0.43 (U)			
8/26/2020		0.221 (U)	1.28	1.31		0.177 (U)	0.26 (U)	
3/16/2021	0.722 (U)							0.709 (U)
3/22/2021						0.263 (U)		
3/23/2021		0.83 (U)	0.592 (U)	0.565 (U)				
3/24/2021					0.769 (U)		0.664 (U)	
10/5/2021	1.21			1.48		3.21	1.75	1.44
10/11/2021		6.52			2.38			
10/12/2021			1.02 (U)					
5/9/2022								1.16
5/10/2022	0.761 (U)	0.421 (U)		0.531 (U)		0.189 (U)		
5/16/2022					1.06		0.978	
5/17/2022			1.01 (U)					
Mean	0.6533	1.194	0.9991	0.6435	0.9004	0.8173	0.6932	0.8268
Std. Dev.	0.282	2.167	0.2445	0.518	0.671	1.01	0.542	0.4167
Upper Lim.	0.9521	2.767	1.258	1.193	1.555	1.44	1.268	1.268
Lower Lim.	0.3544	0.005055	0.74	0.09446	0.3002	0.177	0.1187	0.3851

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/7/2017			7.45 (o)					
12/3/2018	0.304 (U)				0.188 (U)		0.736	0.238 (U)
12/4/2018		0.325 (U)	0.875					
12/5/2018				0.52 (U)				
2/5/2019	0.196 (U)				0.274 (U)			
2/6/2019		0.0774 (U)	0.378 (U)	0.244 (U)				
2/7/2019							0.0202 (U)	0.395 (U)
8/20/2019	-0.086 (U)				0.663			
8/21/2019		-0.0134 (U)	0.552 (U)	1.53 (U)			0.442 (U)	-0.00256 (U)
4/13/2020	0.0901 (U)				-0.129 (U)	0.472 (U)		
4/14/2020			0.641 (U)	0.119 (U)				
4/15/2020		0.526 (U)					0.432 (U)	0.000738 (U)
8/24/2020					0.177 (U)	-0.00312 (U)	0.454 (U)	0.404 (U)
8/26/2020	0.416 (U)	0.691 (U)	0.339 (U)	1.18				
3/16/2021							0.32 (U)	0.589 (U)
3/17/2021	0.539 (U)					0.756 (U)		
3/23/2021		0.45 (U)	0.662 (U)	0.694 (U)				
3/24/2021					0.245 (U)			
10/5/2021	1.36	1.27			2.07	1.13		
10/12/2021			0.291 (U)	0.311 (U)			0.963 (U)	1.57
5/9/2022					0.784 (U)	0.352 (U)		
5/10/2022	0.0979 (U)	0.599 (U)					0.659 (U)	0.468 (U)
5/11/2022			0.475 (U)	0.605 (U)				
Mean	0.3646	0.4906	0.5266	0.6504	0.534	0.5414	0.5033	0.4578
Std. Dev.	0.4481	0.399	0.196	0.4837	0.6841	0.4271	0.2848	0.4972
Upper Lim.	1.089	0.9135	0.7344	1.163	2.07	1.257	0.8052	1.157
Lower Lim.	0.0003213	0.0677	0.3189	0.1377	-0.129	-0.1743	0.2014	0.003799

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-12	GSD-AP-MW-2	GSD-AP-MW-3	GSD-AP-MW-4	GSD-AP-MW-5
2/5/2019	0.0525 (J)				0.207		0.259	0.0651 (J)
2/6/2019		0.107	0.0678 (J)	<0.125				
2/25/2019						<0.125		
2/26/2019	<0.125	0.0813 (J)			0.264		0.246	
2/27/2019			0.0985 (J)	<0.125				0.0578 (J)
6/18/2019						0.0664 (J)		
8/20/2019					0.252	0.0592 (J)	0.197	0.0567 (J)
8/21/2019	<0.125							
8/22/2019		0.084 (J)	<0.125	<0.125				
4/13/2020						<0.125		0.0688 (J)
4/14/2020			0.0878 (J)	<0.125				
4/15/2020	<0.125	0.112			0.21		0.238	
8/24/2020								0.0607 (J)
8/25/2020	<0.125				0.273			
8/26/2020		0.0997 (J)	<0.125	<0.125		<0.125	0.251	
3/16/2021	<0.125							0.065 (J)
3/22/2021						<0.125		
3/23/2021		0.101	0.0819 (J)	<0.125				
3/24/2021					0.194		0.227	
10/5/2021	0.0601 (J)			<0.125		<0.125	0.214	0.122
10/11/2021		0.201			0.283			
10/12/2021			0.134					
5/9/2022								0.0682 (J)
5/10/2022	<0.125	0.0918 (J)		<0.125		0.0714 (J)		
5/16/2022					0.264		0.17	
5/17/2022			<0.125					
Mean	0.1078	0.1097	0.1056	0.125	0.2434	0.1028	0.2253	0.07054
Std. Dev.	0.03187	0.03838	0.02477	0	0.03433	0.03088	0.03018	0.02127
Upper Lim.	0.125	0.201	0.1109	0.125	0.2798	0.125	0.2572	0.122
Lower Lim.	0.0525	0.0813	0.06956	0.125	0.207	0.0592	0.1933	0.0567

Confidence Interval

Constituent: Fluoride (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-6	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9	GSD-AP-PZ-1	GSD-AP-PZ-5	GSD-AP-PZ-6
2/5/2019	0.0581 (J)				0.0934 (J)		
2/6/2019		<0.125	<0.125	<0.125			
2/7/2019						<0.125	<0.125
2/25/2019					<0.125	<0.125	<0.125
2/26/2019	0.0816 (J)						
2/27/2019		0.0824 (J)	0.108	0.147			
8/20/2019	<0.125				0.0889 (J)		
8/21/2019		0.068 (J)	0.0648 (J)	0.0984 (J)		<0.125	<0.125
4/13/2020	<0.125				0.103		
4/14/2020			0.0845 (J)	0.133			
4/15/2020		0.0775 (J)				<0.125	<0.125
8/24/2020					0.114	<0.125	<0.125
8/26/2020	<0.125	<0.125	0.0732 (J)	0.13			
3/16/2021						<0.125	<0.125
3/17/2021	<0.125						
3/23/2021		<0.125	0.0802 (J)	0.132			
3/24/2021					0.0725 (J)		
10/5/2021	<0.125	0.0933 (J)			<0.125		
10/12/2021			0.123	0.147		<0.125	<0.125
5/9/2022					0.0824 (J)		
5/10/2022	<0.125	0.0627 (J)				<0.125	<0.125
5/11/2022			0.0695 (J)	0.108 (J)			
Mean	0.1112	0.09486	0.09103	0.1276	0.1005	0.125	0.125
Std. Dev.	0.02629	0.02657	0.02418	0.01712	0.01959	0	0
Upper Lim.	0.125	0.08819	0.1167	0.1457	0.1066	0.125	0.125
Lower Lim.	0.0581	0.06546	0.06539	0.1094	0.07809	0.125	0.125

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2	GSD-AP-PZ-2	GSD-AP-PZ-5	GSD-AP-PZ-6
12/3/2018			<0.0002	<0.0002
12/4/2018	<0.0002			
2/5/2019	<0.0002			
2/7/2019			<0.0002	<0.0002
8/20/2019	<0.0002			
8/21/2019			<0.0002	<0.0002
4/13/2020		<0.0002		
4/15/2020	<0.0002		<0.0002	<0.0002
8/24/2020		<0.0002	<0.0002	<0.0002
8/25/2020	<0.0002			
3/16/2021			0.00013 (J)	8.35E-05 (J)
3/17/2021		0.000191 (J)		
3/24/2021	<0.0002			
10/5/2021		0.00012 (J)		
10/11/2021	9E-05 (J)			
10/12/2021			<0.0002	0.00012 (J)
5/9/2022		0.00018 (J)		
5/10/2022			<0.0002	0.00012 (J)
5/16/2022	<0.0002			
Mean	0.0001862	0.0001782	0.0001912	0.0001654
Std. Dev.	3.889E-05	3.356E-05	2.475E-05	4.901E-05
Upper Lim.	0.0002	0.000205	0.0002	0.0002
Lower Lim.	9E-05	0.0001023	0.00013	8.35E-05

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-2
12/4/2018	0.0474
2/5/2019	0.0545
8/20/2019	0.0583
4/15/2020	0.0406
8/25/2020	0.041
3/24/2021	0.0318
10/11/2021	0.0225
5/16/2022	0.0271
Mean	0.0404
Std. Dev.	0.01276
Upper Lim.	0.05393
Lower Lim.	0.02687

Confidence Interval

Constituent: Mercury (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-PZ-6
12/3/2018				<0.0005
12/4/2018	0.000302 (J)	0.00034 (J)	0.000284 (J)	
2/6/2019	<0.0005	<0.0005	<0.0005	
2/7/2019				<0.0005
8/21/2019		<0.0005	<0.0005	<0.0005
8/22/2019	<0.0005			
4/14/2020			<0.0005	
4/15/2020	<0.0005	<0.0005		<0.0005
8/24/2020				<0.0005
8/26/2020	<0.0005	<0.0005	<0.0005	
3/16/2021				<0.0005
3/23/2021	<0.0005	<0.0005	<0.0005	
10/5/2021		<0.0005		
10/11/2021	<0.0005			
10/12/2021			<0.0005	<0.0005
5/10/2022	<0.0005	<0.0005		0.00286
5/11/2022			<0.0005	
Mean	0.0004753	0.00048	0.000473	0.000795
Std. Dev.	7E-05	5.657E-05	7.637E-05	0.0008344
Upper Lim.	0.0005	0.0005	0.0005	0.00286
Lower Lim.	0.000302	0.00034	0.000284	0.0005

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-10	GSD-AP-MW-11	GSD-AP-MW-2	GSD-AP-MW-4	GSD-AP-MW-5	GSD-AP-MW-7	GSD-AP-MW-8	GSD-AP-MW-9
12/3/2018				<0.0002				
12/4/2018	<0.0002	<0.0002	0.0118			<0.0002	<0.0002	
12/5/2018					<0.0002			<0.0002
2/5/2019			0.0196	<0.0002	<0.0002			
2/6/2019	<0.0002	<0.0002				<0.0002	<0.0002	<0.0002
8/20/2019			0.027	<0.0002	<0.0002			
8/21/2019						<0.0002	<0.0002	<0.0002
8/22/2019	<0.0002	<0.0002						
4/13/2020					<0.0002			
4/14/2020		<0.0002					<0.0002	<0.0002
4/15/2020	<0.0002		0.0202	<0.0002		<0.0002		
8/24/2020					<0.0002			
8/25/2020			0.0269					
8/26/2020	<0.0002	<0.0002		<0.0002		<0.0002	<0.0002	<0.0002
3/16/2021					<0.0002			
3/23/2021	0.000204	0.000124 (J)				<0.0002	0.000357	0.00027
3/24/2021			0.0164	0.00118				
10/5/2021				0.00111	0.00015 (J)	0.0001 (J)		
10/11/2021	0.00045		0.0204					
10/12/2021		0.00015 (J)					0.00032	0.00018 (J)
5/9/2022					0.00011 (J)			
5/10/2022	0.00047					<0.0002		
5/11/2022							0.0004	0.00024
5/16/2022			0.0201	0.00122				
5/17/2022		0.00012 (J)						
Mean	0.0002655	0.0001742	0.0203	0.0005637	0.0001825	0.0001875	0.0002596	0.0002112
Std. Dev.	0.0001202	3.659E-05	0.005021	0.0005029	3.412E-05	3.536E-05	8.503E-05	2.9E-05
Upper Lim.	0.00047	0.0002	0.02562	0.00122	0.0002	0.0002	0.0004	0.00027
Lower Lim.	0.0002	0.00012	0.01498	0.0002	0.00011	0.0001	0.0002	0.00018

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-PZ-1	GSD-AP-PZ-2
12/3/2018	<0.0002	
2/5/2019	<0.0002	
8/20/2019	<0.0002	
4/13/2020	<0.0002	<0.0002
8/24/2020	<0.0002	<0.0002
3/17/2021		<0.0002
3/24/2021	9.88E-05 (J)	
10/5/2021	7E-05 (J)	0.00028
5/9/2022	<0.0002	<0.0002
Mean	0.0001711	0.000216
Std. Dev.	5.406E-05	3.578E-05
Upper Lim.	0.0002	0.00028
Lower Lim.	7E-05	0.0002

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 7/18/2022 2:07 PM View: Confidence Intervals

Plant Gadsden Client: Southern Company Data: Plant Gadsden CCR

	GSD-AP-MW-1	GSD-AP-MW-2	GSD-AP-MW-3
12/4/2018	<0.0002	<0.0002	
2/5/2019	<0.0002	0.000256 (J)	<0.0002
6/18/2019			<0.0002
8/20/2019		0.000322 (J)	<0.0002
8/21/2019	<0.0002		
4/13/2020			<0.0002
4/15/2020	<0.0002	0.000318 (J)	
8/25/2020	<0.0002	0.000347 (J)	
8/26/2020			<0.0002
3/16/2021	0.000112 (J)		
3/22/2021			0.000121 (J)
3/24/2021		0.00037	
10/5/2021	<0.0002		0.00014 (J)
10/11/2021		0.00029	
5/10/2022	0.00013 (J)		0.00011 (J)
5/16/2022		0.00041	
Mean	0.0001802	0.0003141	0.0001714
Std. Dev.	3.688E-05	6.596E-05	4.033E-05
Upper Lim.	0.0002	0.000384	0.0002
Lower Lim.	0.000112	0.0002442	0.00011

Appendix F

April 2022
Plant Gadsden

ANCHOR QEA

Laboratory Treatability Study Work Plan

Prepared for Alabama Power Company

April 2022
Plant Gadsden

Laboratory Treatability Study Work Plan

Prepared for
Alabama Power Company
600 18th Street North
Birmingham, Alabama 35203

Prepared by
Anchor QEA, LLC
6720 South Macadam Avenue, Suite 125
Portland, Oregon 97219

Project Number: 201114-03.02
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ABBREVIATIONS

µm	micrometers
ADEM	Alabama Department of Environmental Management
APC	Alabama Power Company
CCR	coal combustion residuals
COI	constituent of interest
DO	dissolved oxygen
EGL	Anchor QEA Environmental Geochemistry Laboratory
MNA	monitored natural attenuation
ORP	oxidation-reduction potential
Plant Gadsden	Gadsden Electric Generating Plant
SC	specific conductivity
SCS	Southern Company Services
Site	Plant Gadsden ash pond
SSE	selective sequential extraction
USEPA	U.S. Environmental Protection Agency
ZVI	zero-valent iron

1 Introduction

This work plan describes laboratory treatability studies for arsenic and lithium in groundwater at the Gadsden Electric Generating Plant (Plant Gadsden) ash pond (Site), located in Etowah County, Alabama. Plant Gadsden is owned and operated by Alabama Power Company (APC). This work builds on work previously performed for the Site by Anchor QEA.

As of April 15, 2019, the Site ceased receipt of all coal combustion residuals (CCR) and non-CCR waste streams. APC has been monitoring groundwater at the Site in accordance with the U.S. Environmental Protection Agency (USEPA) CCR Rule and the Alabama Department of Environmental Management (ADEM) rule since 2016. Constituents of interest (COIs) for the Site include arsenic and lithium.

In 2020 and 2021, corrective measures for groundwater were evaluated for the Site. In situ groundwater treatment via injection was selected as one viable option, particularly for areas with higher concentrations of COIs in groundwater (hot spots). Therefore, pilot tests at two locations were proposed in the *Groundwater Remedy Selection Report* (Anchor QEA 2021a). The necessary steps to implement an injection treatment pilot test include laboratory treatability studies, selection of the most effective treatment reagent(s), and preparation of an underground injection control application.

The treatability studies proposed herein will evaluate reagent selection, dosing, and injection sequencing for in situ groundwater treatment as described in the following subsections. Background information, including Site-specific findings from monitored natural attenuation (MNA) studies and reagents to be tested in the treatability studies, is summarized in Section 2. Initial characterization of groundwater and aquifer solids (i.e., soil) is discussed in Section 3 followed by an overview of the treatability study approach including batch testing (Section 4), column studies (Section 5), and selective sequential extraction (SSE; Section 6). Analysis of the treatability study data and reporting are discussed in Section 7 and the project schedule is presented in Section 8.

2 Selection of Reagents

Selection and formulation of reagent solutions that can be injected to sequester Site-specific COIs will be based on Site-specific soil and groundwater geochemistry, previous Site work, and experience from successful treatability studies performed by Anchor QEA for the same COIs at other sites. The MNA demonstration (Anchor QEA 2021a) documented key geochemical attenuation mechanisms occurring at the Site, including:

- Sorption on and/or coprecipitation with iron and manganese oxides (for arsenic and lithium)
- Ion exchange on clays (for lithium)
- Precipitation of barium arsenate (for arsenic)

Iron oxides are strong sorbents for many metals and metalloids including arsenic, and Eh-pH conditions in the subsurface at the Site are generally favorable for formation of iron oxides. Lithium has an affinity for manganese and iron-manganese oxides. Therefore, the treatability studies are focused on reagents (or mixtures) with the potential to increase the abundance and the stability of iron and/or manganese oxides and hydroxides in the subsurface. Barium chloride was added to the reagent list, as geochemical modeling predicted that barium arsenate could precipitate from groundwater if sufficient barium were present in the system. Based on Site conditions and previous treatability studies for other CCR sites (e.g., EPRI 2021), the following reagents were selected for treatability testing:

1. Ferrous sulfate
2. Ferric chloride
3. CleanER (injectable zero-valent iron [ZVI])
4. Ferroblack (injectable iron sulfide)
5. Permanganate
6. Ferrous sulfate with permanganate
7. Ferric chloride with permanganate and manganese chloride
8. Barium chloride
9. Aeration
10. Hydrotalcite
11. Dolomite fines
12. Magnesium chloride plus sodium aluminate

These 12 potential treatments (or mixtures thereof) will be screened and evaluated through batch testing as described in Section 4. The most promising reagents (or mixtures) will be selected for column studies (see Section 5).

3 Sampling and Initial Characterization

Aquifer solids (i.e., soil) and groundwater will be collected from the Site for treatability testing to be conducted at the Anchor QEA Environmental Geochemistry Laboratory (EGL). Site aquifer solids (soil) and groundwater will be collected in accordance with the *Aquifer Solids and Groundwater Sampling Scope of Work for Treatability Studies* (Anchor QEA 2021b) memorandum.

3.1 Groundwater

Groundwater samples will be collected by Alabama Power with support from Anchor QEA from wells[1] GSD-AP-MW-2, GSD-AP-MW-2VA, GSD-AP-MW-2VB, and GSD-AP-MW-4. Five gallons of Site groundwater from each selected well will be required to complete the batch treatability tests (described in Section 4). An additional 10 gallons of Site groundwater from each selected well will be required to complete the column testing (described in Section 5) and will be collected after the batch testing is completed. As detailed in the sampling plan, the groundwater provided to the EGL will be collected, transported, and handled to minimize exposure to oxygen. Groundwater samples will be field-filtered with a 0.45-micron inline filter.

Groundwater samples will be analyzed for COIs (arsenic and lithium), as well as other Appendix III/IV parameters, and additional MNA parameters by Alabama Power (Table 1). Supplemental analyses will be performed for COIs and select parameters including pH, oxidation-reduction potential [ORP], dissolved oxygen [DO], total and dissolved iron and manganese on as-received samples prior to commencing treatability testing. Groundwater characterization data will guide the treatability study design and the evaluation of results.

3.2 Aquifer Solids

Aquifer solids were collected from two pilot test borings (GSD-AP-PT-1 and -2) as described in the *Aquifer Solids and Groundwater Sampling Scope of Work for Treatability Studies* (Anchor QEA 2021b) memorandum and as appear in Figure 1. Initial characterization of aquifer solids (soil) will include the analyses listed in Table 2.

3.3 Reagents

Prior to initiating the column studies (described in Section 5), a sample of each of the selected reagents will be analyzed for Appendix III/ IV parameters to characterize impurity levels of these constituents.

[1] Groundwater will be collected from one upgradient well (GSD-AP-MW-14, GSD-AP-MW-16, or GSD-AP-MW-17) for column tests only.

4 Batch Tests

Screening batch tests will be performed to assess the effectiveness of injectable reagents (see list of reagents in Section 2) in reducing COI concentrations in Site groundwater and groundwater-soil slurries.

The approach for screening batch tests is as follows[2]:

- Step 1: Test jars will be set up with groundwater or groundwater/aquifer solid slurries.
- Step 2: Reagents or reagent mixtures will be added to the test jars at a pre-determined dose based on groundwater chemistry and prior experience. Test jars will also include controls with no reagents added. Test jars will be sealed and placed on a shaker table for 7 days.
- Step 3: Samples of the treated groundwater solutions will be collected and analyzed for dissolved arsenic and lithium (per the analytical laboratory methods specified in Table 1). pH, ORP, and specific conductivity (SC) will be measured in the EGL.
- Step 4: The solids from each batch reactor will be recovered and archived for possible future analysis.

Arsenic and lithium removal efficiency will be evaluated by comparing the initial concentrations in the groundwater samples and controls to the concentrations in the treated groundwater solutions.

Following the initial screening batch tests, additional focused batch testing may be conducted to optimize COI removal. For example, these optimization batch tests may involve adjusting the dose of a reagent or adjusting the pH to increase COI removal. Following completion of the batch testing, up to two reagents (or reagent mixtures) that achieve successful removal of arsenic and lithium will be selected for column studies.

[2] Batch tests will be conducted in accordance with modified versions of ASTM International Methods D2035-19 (Practice for Coagulation-Flocculation Jar Test of Water) and D4646-03 (Test Method for 24-h Batch-Type Measurement of Contaminant Sorption by Soils and Sediments).

5 Column Studies

Column studies will be conducted to simulate injection applications of the selected reagents (or reagent mixtures). The results of the column studies will be used to confirm arsenic and lithium removal efficiency and determine uptake capacity of injection-treated aquifer soil to support pilot test design. Results from column studies will also be used to confirm that treatments will not inadvertently increase concentrations of other constituents above groundwater quality standards, for example, due to release from the aquifer matrix.

The approach for column studies is as follows (Westerhoff et al. 2005):

- Step 1: Aquifer solids will be treated with the selected reagent or reagent mixture by treating a pre-weighed homogenized mass of aquifer solids with a predetermined amount of the selected reagent(s; based on the batch test results) in solution. The soil-reagent mixture will be placed on a shaker table and allowed to react for three days.
- Step 2: The treated aquifer solids will be packed into 4.2-centimeter diameter by 22-centimeter length polycarbonate column assemblies. Site groundwater containing COIs will be introduced into column influents at a constant flow rate.
- Step 3: Columns will be operated for a total of 4 weeks or approximately 100 pore volumes.
- Step 4: Column influent and effluent solutions will be sampled periodically and pH, ORP, and SC will be measured. The cumulative flow volume will also be recorded at the time of sampling and used to calculate the total number of pore volumes treated.
- Step 5: Samples will be filtered (0.45 micrometers [µm]) and analyzed for dissolved arsenic and lithium, and treatment reagent constituent concentrations. Select Appendix III and IV constituents (Table 1) may also be analyzed based on soil concentrations.
- Step 6: Following completion of this phase of the column test, the column influent will be switched to background groundwater to assess the stability of the treatment. The column will continue to run at a constant flow rate for approximately 10 pore volumes. Column influents and effluents will be sampled at approximately 5 and 10 pore volumes of flow. Samples will be analyzed for dissolved COIs, constituents of the treatment reagents used (e.g., iron, manganese, barium, chloride, sulfate), and select Appendix III/ IV constituents.

Arsenic and lithium removal efficiency (and mass uptake from groundwater) will be evaluated by comparing the respective concentrations in the column influent to the concentrations in the effluent. COI removal capacity per unit reagent dose will be estimated from column breakthrough curves and mass balance calculations. The removal capacity will provide data to support design of pilot tests, including injection volumes and reagent mass. At the end of the column tests, column solids will be recovered for SSE to further document COI sequestration strength by the reagent-treated soil matrix and to assess the stability of the treatment.

6 Selective Sequential Extraction of Treated Soil

Following completion of the column tests, the column media will be recovered and tested using a five-step SSE procedure. The extraction procedure is designed to fractionate the COIs in a solid sample by subjecting the sample to a sequence of chemical treatments that target specific chemical forms. Concentrations and relative proportions of arsenic and lithium present in the operationally defined fractions shown in Table 3 will be determined on a total sample dry weight basis. Sequential extraction will be performed in accordance with the EGL standard operating procedure.

SSE will provide information on the stability of COIs removed by precipitates formed in situ via reagent injection under conditions representative of Site application. These data will support a more thorough understanding of the permanence (stability) of COI removal by the treatment.

7 Data Analysis and Reporting

Anchor QEA will analyze the data from the batch tests, column tests, and SSE results and make recommendations regarding the reagents or reagents mixtures to be used for pilot testing at the Site. Results from the column tests will also be used to support pilot test design. The recommended reagent or mix will be tailored to the COIs present and geochemical conditions at each pilot location.

Anchor QEA will meet with the client to review the results of the batch tests and discuss the recommended reagent(s) prior to initiating the column studies. After the column studies and SSE are complete, Anchor QEA will present findings and recommendations to the client in advance of preparing the draft treatability study report. This report will document the treatability studies, present the data obtained through these studies, and discuss recommendations for pilot studies of the most promising treatment(s).

8 References

Anchor QEA, 2021a. *Groundwater Remedy Selection Report*. Plant Gadsden. Prepared for Alabama Power Company. October 2021.

Anchor QEA, 2021b. Memorandum to: Greg Dyer, Southern Company Services, Inc. Regarding: Aquifer Solids and Groundwater Sampling Scope of Work for Treatability Studies. December 23, 2021.

Westerhoff, P., D. Highfield, M. Badruzzaman, and Y. Yoon, 2005. "Rapid Small-Scale Column Tests for Arsenate Removal in Iron Oxide Packed Bed Columns." *Journal of Environmental Engineering* 131(2):262–271.

Tables

Table 1

Groundwater Characterization Parameters and Laboratory Analytical Methods

Parameter	Analytical Method	Detection Limit
Appendix III Parameters		
Boron	EPA 200.8/6020	10.0 µg/L
Calcium	EPA 200.8/6020	600 µg/L
Chloride	300.0/9056A	1.00 mg/L
Fluoride	SM 4500 F_C	0.100 mg/L
pH	None	--
Sulfate	300.0/9056A	1.00 mg/L
Total dissolved solids	SM 2540C	5.00 mg/L
Appendix IV Parameters		
Antimony	EPA 200.8/6020	1.00 µg/L
Arsenic	EPA 200.8/6020	1.00 µg/L
Barium	EPA 200.8/6020	2.00 µg/L
Beryllium	EPA 200.8/6020	0.200 µg/L
Cadmium	EPA 200.8/6020	0.200 µg/L
Chromium	EPA 200.8/6020	2.00 µg/L
Cobalt	EPA 200.8/6020	1.00 µg/L
Fluoride	SM 4500 F_C	0.100 mg/L
Lead	EPA 200.8/6020	0.200 µg/L
Lithium	EPA 200.8/6020	5.00 µg/L
Mercury	EPA 1631	0.000100 mg/L
Molybdenum	EPA 200.8/6020	1.00 µg/L
Selenium	EPA 200.8/6020	1.00 µg/L
Thallium	EPA 200.8/6020	0.200 µg/L
MNA-Specific Parameters		
Alkalinity (total as $CaCO_3$)	SM 2320 B	20.0 mg/L
Aluminum (total and dissolved)	EPA 200.8/6020	50.0 µg/L
Bicarbonate alkalinity (calculated)	SM 4500CO2 D	20.0 mg/L
Carbonate alkalinity (calculated)	SM 4500CO2 D	20.0 mg/L
Iron (total and dissolved)	EPA 200.8/6020	50.0 µg/L
Magnesium (dissolved)	EPA 200.8/6020	150.0 µg/L
Manganese (total and dissolved)	EPA 200.8/6020	1.00 µg/L
Nitrogen nitrate/nitrite	EPA 353.2	0.0200 mg/L
Potassium (dissolved)	EPA 200.8/6020	100 µg/L
Silica (dissolved)	SM 4500-Si02	0.500 mg/L
Sodium (dissolved)	EPA 200.8/6020	100.0 µg/L
Sulfide	SM 4500-S2	Subcontracted
Total organic carbon	SM 5310 C	1.00 mg/L

Notes:

The following field parameters will be measured for each monitoring well sample: depth to water, total depth, pH, temperature, ORP, DO, turbidity, and SC.

µg/L: micrograms per liter

DO: dissolved oxygen

EPA: U.S. Environmental Protection Agency

mg/L: milligrams per liter

ORP: oxidation reduction potential

SC: specific conductance

SM: Standard Method

Table 2
Constituents and Analytical Methods

Constituent	Analytical Method	Detection Limit
Arsenic	EPA Method 6020B	0.5 mg/kg
Cobalt	EPA Method 6020B	0.5 mg/kg
Lithium	EPA Method 6020B	2.5 mg/kg
Iron	EPA Method 6020B	1 mg/kg
Manganese	EPA Method 6020B	1 mg/kg
Cation exchange capacity	EGL SOP/6020B	--
Extractable iron, aluminum, and manganese oxides	EGL SOP/6020B	1 mg/kg
Sulfide	SM4500-S2	1 mg/kg
Total organic carbon	EPA Method 9060A	200 mg/kg
Appendix IV Parameters		
Antimony	EPA 200.8/6020	0.5 mg/kg
Barium	EPA 200.8/6020	0.5 mg/kg
Beryllium	EPA 200.8/6020	0.5 mg/kg
Cadmium	EPA 200.8/6020	0.5 mg/kg
Chromium	EPA 200.8/6020	0.5 mg/kg
Fluoride	SM 4500 F_C	1 mg/kg
Lead	EPA 200.8/6020	0.5 mg/kg
Mercury	EPA 1631	0.5 mg/kg
Molybdenum	EPA 200.8/6020	0.5 mg/kg
Selenium	EPA 200.8/6020	0.5 mg/kg
Thallium	EPA 200.8/6020	0.5 mg/kg

Notes:
Solids will be digested by EPA Method 3050B prior to analysis.
EPA: U.S. Environmental Protection Agency
mg/kg: milligrams per kilogram
SOP: standard operating procedure
SM: standard method

Table 3
Sequential Extraction Procedure

Fraction	Name	Targeted COI Phase	Extraction Fluid
F1	Soluble	Dissolved and loosely bound	Magnesium chloride
F2	Exchangeable	Clay mineral exchange sites and weakly bound to oxides	Ammonium phosphate
F3	Reducible	Amorphous iron oxide bound	Hydroxylamine hydrochloride
F4	Strong Acid/Oxidizable	Crystalline oxides, sulfides and/or organic matter bound	Nitric acid
F5	Residual	Silicates and other insoluble phases	Aqua regia

Figure

LEGEND:

- Plant Gadsden Ash Pond Boundary
- Existing Monitoring Well
- Typical groundwater flow direction
- Arsenic SSL
- Arsenic and Lithium SSLs
- Pilot Test Injection Area
- Proposed Approximate Location of Pilot Test Boring

NOTES:
As: arsenic
GWPS: groundwater protection standard
Li: lithium
mg/L: milligrams per liter
SSL: statistically significant level

Groundwater concentrations are from May 2021 sampling event.

0 500
Feet

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ANCHOR QEA

Figure 1
Proposed Pilot Test Boring Locations
Laboratory Treatability Study Work Plan
Plant Gadsden