2023 SEMI-ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GORGAS
CCR LANDFILL

July 31, 2023

Prepared for

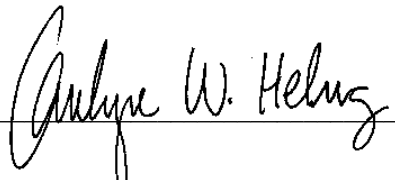
Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

CERTIFICATION STATEMENT

This *2023 Semi-Annual Groundwater Monitoring and Corrective Action Report, Alabama Power Company - Plant Gorgas CCR Landfill* 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 Ch. 335-13-15, and Part E of ADEM Administrative Order No. 18-096-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.



7/31/2023

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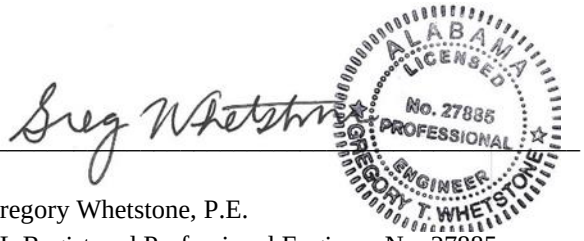

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EXECUTIVE SUMMARY

In accordance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR Part 257, Subpart D), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-096-GW, this 2023 Semi-Annual Groundwater Monitoring and Corrective Action Report has been prepared to document the first 2023 semi-annual assessment groundwater monitoring activities at the Alabama Power Company (APC) William Crawford Gorgas Electric Generating Plant (Plant Gorgas) CCR Landfill and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), and Part E of AO No. 18-096-GW. Semi-annual assessment monitoring and associated reporting for the Plant Gorgas CCR Landfill is performed in accordance with the monitoring requirements § 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 § 257.98, ADEM Admin. Code r. 335-13-15-.06(9), and AO No. 18-096-GW. Statistically significant increases (SSI) of Appendix III constituents over background were identified in the results of the first detection monitoring event and assessment monitoring was initiated in January 2018. Statistically significant levels (SSL) of the Appendix IV constituent lithium were identified in one well above groundwater protection standards (GWPS) while in assessment monitoring. Following completion of statistical analysis of Appendix IV data from subsequent assessment events, SSLs have not been observed. Consequently, an Alternate Source Demonstration (ASD) was submitted to ADEM for lithium SSLs above the GWPS in January of 2019.

APC completed an Assessment of Corrective Measures (ACM) report submitted to ADEM in June 2019 to address the occurrence of constituents in groundwater at SSLs at the Plant Gorgas Ash Pond and Gypsum Pond. In February 2020, APC revised the ACM to include the CCR Landfill. However, it should be noted that SSLs at the CCR Landfill have not been observed since 2018.

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.18-096-GW and submitted to ADEM on December 17, 2021. Subsequently, within 90 days of remedy selection, a Corrective Action Groundwater Monitoring Program was developed and submitted to ADEM on March 15, 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.

Statistical evaluations of the first 2023 semi-annual assessment monitoring data did not identify SSLs of Appendix IV constituents above the GWPS. In accordance with § 257.95(d) and ADEM Admin. Code r. 335-13-15-.06(6)(d), APC will continue assessment monitoring. The following summarizes results and activities conducted during the 2023 first semi-annual monitoring period:

- Submitted the 2022 Annual Groundwater Monitoring and Corrective Action Report on January 31, 2023.
- Resurveyed the ground surface and top of casing elevations for all on-site wells on April 13, 2023 by a licensed Professional Land Surveyor.
- Completed the first semi-annual assessment groundwater sampling event from February 20 - 22, 2023.

The CCR Landfill concluded the monitoring period in assessment monitoring. The following future actions will be taken or are recommended for the Site:

- Evaluation of collected MNA parameter data and ongoing compliance monitoring.
- Conduct the second semi-annual assessment monitoring event in 2023 and submit the Annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by January 31, 2024.

Executive Summary Table.
Monitoring Period Summary
Plant Gorgas - CCR Landfill

Assessment Monitoring Inintiated: January 15, 2018
Monitoring Period: January 1 - July 31, 2023
Beginning Status: Assessment
Ending Status: Assessment

Statistical Analysis Results *

Appendix III SSIs

Parameter	Wells
Boron	None.
Calcium	None.
Chloride	MW-5, MW-7, MW-8.
Fluoride	MW-1 (upgradient), MW-2 (upgradient), MW-6, and MW-7
pH	MW-5, MW-7, MW-8.
Sulfate	None.
TDS	None.

Appendix IV SSLs

No Significant Results.

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

Assessment of Corrective Measures & Groundwater Remedy

Assessment of Corrective Measures

Site Remains in Assessment Monitoring (§ 257.95(d) & Alabama Admin. Code r. 335-13-15-.06(6)(d))

Groundwater Remedy

Site Remains in Assessment Monitoring (§ 257.95(d) & Alabama Admin. Code r. 335-13-15-.06(6)(d))

TABLE OF CONTENTS

EXECUTIVE SUMMARY i

1.0 Introduction 1

2.0 Monitoring Program Status 2

3.0 Site Location and Description 3

3.1 Physical Setting 3

3.2 Site Geology and Hydrogeology 3

3.2.1 Pottsville Formation – Rock Chemistry 5

3.2.2 Uppermost Aquifer 6

3.2.3 Flow Interpretation 7

3.3 Groundwater Monitoring System 7

3.3.1 Monitoring Wells 8

3.3.1.1 Upgradient Wells 8

3.3.1.2 Downgradient Wells 9

3.3.1.3 Piezometers 9

3.3.1.4 Monitoring Well Replacement and Abandonment 9

3.4 Groundwater Monitoring History 9

3.4.1 Available Monitoring Data 10

3.4.2 Historical Groundwater Flow 10

3.4.3 Monitoring Variance 10

3.5 Groundwater Sampling and Analysis 10

3.5.1 Groundwater Sample Collection 11

3.5.2 Sample Preservation and Handling 11

3.5.3 Chain of Custody 12

3.5.4 Laboratory Analysis 12

3.5.5 Monitoring Period Sampling Events 12
4.0 Groundwater Elevations and Flow 13
4.1 Groundwater Flow Velocity Calculations 13
5.0 Evaluation of Groundwater Quality Data 15
5.1 Data Validation – Quality Assurance/Quality Control 15
5.2 Statistical Methodology and Tests 16
5.2.1 Appendix III Evaluation 16
5.2.2 Appendix IV Evaluation 17
5.3 Statistical Exceedances 18
5.3.1 Appendix III Constituents 18
5.3.2 Appendix IV Constituents 18
6.0 Alternate Source Demonstration 19
7.0 Groundwater Delineation 20
8.0 Summary and Conclusions 21
9.0 References 22

FIGURES

Figure 1	Site Location Map
Figure 2	Site Topographic Map
Figure 3	Site Geologic Map
Figure 4A	Geologic Cross-Section A-A’
Figure 4B	Geologic Cross-Section B-B’
Figure 5	Well Network Location Map
Figure 6	Potentiometric Surface Contour Map (February 20, 2023)

TABLES

Table 1	Compliance Monitoring Well Network Details
Table 2	Parameters and Reporting Limits
Table 3	Groundwater Elevations Summary
Table 4	Relative Percent Difference (RPD) Calculations
Table 5	Summary of Background Levels and Groundwater Protection Standards
Table 6	First Semi-Annual Monitoring Event Analytical Results Summary

APPENDICES

Appendix A	Historical Analytical Data Summary
Appendix B	Historical Groundwater Elevations Summary
Appendix C	Laboratory and Field Records
Appendix D	Horizontal Groundwater Flow Velocity Calculations
Appendix E	Statistical Analysis

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
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), the State of Alabama Department of Environmental Management (ADEM) Admin. Code Ch. 335-13-15, and ADEM Administrative Order (AO) No. 18-096-GW, this *2023 Semi-Annual Groundwater Monitoring and Corrective Action Report* has been prepared to document the first semi-annual assessment groundwater monitoring activities at the Plant Gorgas CCR Landfill and to satisfy the requirements of § 257.90(e), ADEM Admin. Code r. 335-13-15-.06(1)(f), and Part E of AO No. 18-096-GW. Semi-annual assessment monitoring and associated reporting for Plant Gorgas CCR Landfill is performed in accordance with the monitoring requirements § 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 (March 15, 2022).

2.0 MONITORING PROGRAM STATUS

In accordance with § 257.94(e) and ADEM Admin. Code r. 335-13-15-.06(5)(e), APC implemented assessment monitoring in January 2018. SSIs of Appendix III were identified at the Plant Gorgas CCR Landfill during the first 2023 semi-annual sampling event, but SSLs of Appendix IV constituents were not reported over the GWPS.

Following completion of statistical analysis of Appendix IV data from the first assessment monitoring event conducted in May 2018, an SSL above the GWPS was reported for lithium in the sample from well MW-6. Lithium concentrations in well MW-6 have been below the GWPS since the first assessment event in May 2018. An ASD for the lithium SSL was submitted in January 2019 to ADEM as part of the 2018 Annual Groundwater Monitoring and Corrective Action Report and is pending ADEM review. The Plant Gorgas ACM prepared under § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW was amended to include the CCR Landfill in February 2020. 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.

3.0 SITE LOCATION AND DESCRIPTION

The Alabama Power Company (APC) William Crawford Gorgas Electric Generating Plant (Plant Gorgas) is located in southeastern Walker County, Alabama, approximately 15 miles south of Jasper, at 460 Gorgas Road, Parrish, AL 35580. Based on visual inspection of USGS topographic quadrangle maps and GIS plant boundary files provided by SCS, the plant occupies portions of Sections 7, 8, 9, 16, 17, 18, 19, 20, 21, 28 and 29, Township 16 South, Range 6 West and Section 12, 13 and 24, Township 16 South, Range 7 West (USGS, 1975; USGS, 1983).

Plant Gorgas CCR Landfill (CCR LF) is located east and northeast of the main power generation facility and is bordered to the north by Highway 269 and to the south by the Mulberry Fork of the Black Warrior River. **Figure 1, Site Location Map**, depicts the location of the Plant and landfill with respect to the surrounding area.

3.1 PHYSICAL SETTING

Plant Gorgas is in the Black Warrior River basin, an area typified by moderate relief, with river and stream valleys having dendritic drainage patterns. Elevations at the Site range from approximately 260 feet above mean sea level (MSL) near the Mulberry Fork and Baker Creek to over 500 feet above MSL along a northwest trending ridge approximately 1,000 feet northwest of the plant and in upland areas on the western part of the property. Near the landfill, the land surface generally slopes from north to south and towards the Mulberry Fork of the Black Warrior River. **Figure 2, Site Topographic Map**, provides the topography of the Site.

Two natural surface water bodies drain Plant Gorgas property. Baker Creek flows from northwest to southeast through the central portion of the plant before draining into the Mulberry Fork of the Black Warrior River. The Mulberry Fork flows from east to west as it bends around the southern border of the plant property.

3.2 SITE GEOLOGY AND HYDROGEOLOGY

Plant Gorgas lies in the Warrior Basin physiographic region (Sapp and Emplaincourt, 1975), a late Paleozoic basin formed as a result of flexure and sediment loading associated with Appalachian and Ouachita orogenies. The bedrock geology is dominated by clastic sedimentary rocks of the Lower Pottsville

Formation. Deeper stratigraphy is marked by carbonates, shales, chert, and sandstones of Mississippian to Cambrian in age (Raymond et al., 1988). Plant Gorgas is directly underlain by rocks belonging to the Pratt Coal Group (Ward II et al., 1989). In general, the Pratt Group consists of mudstone, shale, fine-grained sandstone, and interbedded coal. **Figure 3, Site Geologic Map**, illustrates the surface geology at the Site and neighboring areas.

Plant Gorgas is directly underlain by rocks belonging to the Pratt Coal Group (Ward II et al., 1989) of the Upper Pottsville Formation. In general, the Pratt Coal Group consists of mudstone, shale, fine-grained sandstone, and interbedded coal in fining-upward sequences. The Pratt Coal Group generally contains three named coal seams, each separated by 25 to 50 feet of intra-burden. In descending order, they are the Pratt, Nickel Plate, and American coal seams. Locally, Pratt Coal Group strata gently dip (0.5-1.0 degrees) to the south and south-southwest.

Strip mining was conducted over a large portion of the area down to the American Seam. As a result, the overburden around the CCR Landfill is dominated by backfilled mine overburden (mine spoils) and is characterized by weathered shale and sandstone boulders with lenses of fine sediments and small amounts of coal fragments and coarse sediments. Geologic logs generated during various on-site investigations indicate that the depth to rock varies significantly, ranging from as little as 5 feet (un-mined areas) to as much as 155 feet below ground surface (BGS). Beneath the CCR Landfill, subsurface geology is likely characterized by thin remnants of mine backfill and un-mined portions of the Pratt Coal Group consisting predominantly of mudstone and sandstone. **Figure 4A**, **Geologic Cross-Section A-A'** and **Figure 4B**, **Geologic Cross-Section B-B',** illustrates the geologic layering beneath the Site.

Two water-bearing zones are present beneath the Site: (1) the mine overburden/top-of-rock interface, and (2) the underlying Pottsville aquifer. The mine overburden/top of rock interface is usually a thin zone of saturation overlying rock and is not laterally continuous across all portions of the Site. Depth to this zone generally ranges from 100 to 115 feet beneath the Site.

The Pottsville aquifer system is the primary aquifer in Walker County. Although on a regional scale there are other aquifer systems in the vicinity of Plant Gorgas, the Pottsville aquifer system is the most significant. The nearest exposure of the Valley and Ridge aquifer system occurs in central Jefferson County, approximately 25 miles east of Plant Gorgas. The nearest exposure of the Tuscaloosa aquifer system occurs in northwesternmost Walker County, approximately 30 miles northwest of Plant Gorgas. The Tuscaloosa aquifer system is not considered a primary source of groundwater in Walker County (Stricklin, 1989).

The Pottsville aquifer system is composed primarily of Pennsylvanian-aged sandstones, shales, conglomerates, and coal. Groundwater flow primarily occurs through coal seams or rock fabric discontinuities such as bedding planes and fractures. Groundwater in the Pottsville aquifer system is commonly regarded as confined due to large permeability contrasts within the aquifer (Stricklin, 1989). Recharge to the Pottsville aquifer system is largely through infiltration of precipitation and to a lesser extent, downward seepage of river water at hydraulically favored locations. Recharge is accommodated largely by fracture enhanced permeability. Major recharge zones to the Pottsville aquifer system are related to major geologic structures such as large fault zones or along systematic fold axes (Pashin, 2007). Although the Pottsville aquifer system is the primary aquifer in Walker County, groundwater use is relatively limited. According to O'Rear et al., 1972, groundwater use accounted for approximately 15% of total water use in Walker County in 1966. By 2005, groundwater use had declined to less than 1% of total water use in Walker County, or 1.14 million gallons per day (mgd) of groundwater out of a total water use of 969.5 mgd (USGS, 2005).

3.2.1 Pottsville Formation – Rock Chemistry

Published data indicate that elevated arsenic concentrations occur in the Southern Appalachian coal strata where Site monitoring wells are screened. Numerous publications document elevated trace metals in Pottsville and Pottsville coal strata (Kolker et al., 1999, Diehl et al., 2004, Goldhaber et al., 2002). For instance, according to the USGS National Coal Data System (NRCDS), the average concentration of arsenic (72 ppm) in the Pottsville coal strata is three times that of the average of other coal basins (Bragg et al., 1997). Of the U.S. coal analyses for arsenic that are at least three standard deviations above the mean, approximately 90% are from the coal fields of Alabama (Diehl et al., 2004). The United States Geological Survey (USGS) maintains an inventory of coal quality that includes trace metal concentration data. It shows arsenic concentrations range from 1.08 milligrams per kilograms (mg/kg) to 611.0 mg/kg with a mean of 47 mg/kg for Walker County (USGS Coal Quality Database).

Similarly, 75 Pratt Coal Group samples from the Pratt, Nickel Plate, and American coal seams analyzed by the USGS and inventoried in the USGS National Coal Resources Data System (NCRDS) showed the following ranges of other trace metals:

- Boron – 6.3 to 83.6 ppm (average of 35 ppm).
- Cobalt – 1.6 to 19.8 ppm (average of 8 ppm).

- Molybdenum – 0.8 to 22.2 ppm (average of 5 ppm).
- Lithium – 1.4 to 128 ppm (average of 28 ppm).

Bulk geochemical analyses of Pottsville stratigraphy from the Site and of the Pratt and American coal seams from Plant Gorgas were conducted on recovered core. The data reflect arsenic concentrations between 4.9 mg/kg and 32.6 mg/kg in siltstone/mudstones and concentrations of 28.9 and 384.4 mg/kg in two coal seams analyzed. The average arsenic concentration was roughly 34 mg/kg in these samples tested, which is in good agreement with data observed in the USGS NCRDS.

Similarly, 17 Pratt Coal Group samples collected from the Site provided the following ranges of other trace metals:

- Arsenic – 0 to 384.1 ppm (average of 43.8 ppm).
- Boron – 20.8 to 114 ppm (average of 49 ppm).
- Cobalt – 2.79 to 31.2 ppm (average of 18.6 ppm).
- Molybdenum – 0 to 4.38 ppm (average of 1.06 ppm).

Trace metal enrichment and pyrite origins have been linked to post-depositional (post-coalification) deformation and trace metal laden hydrothermal fluids upwelling during Alleghanian tectonism. Diehl et al., (2004) and Goldhaber et al., (2002) describe "high-pyrite" coals as a source of elevated arsenic and other trace metals. In these publications, pyrite occurrence is observed within coal banding, woody cellular fill structures, mineral overgrowths, and structural fills such as veins and microfaults.

Furthermore, the process of strip mining and backfilling these materials can increase the availability of trace metals to groundwater. These mining processes and practices lead to the physical weakening and enhanced weathering of rock which, along with changed hydrodynamics, can lead to elevated and highly variable concentrations across a historic mine site.

3.2.2 Uppermost Aquifer

The principal aquifer system from a local and regional perspective is the Pottsville aquifer. The Pottsville aquifer is also the uppermost aquifer beneath the Site. In the Pottsville, two types of secondary porosity were observed to yield groundwater: (1) fractured intervals and (2) bedding plane weaknesses associated with fissile, siderite-banded, iron-claystone sequences. Fractured intervals are sporadic across the Site and tend to occur with greater density in the upper 100 feet of rock. The upper portions of the Pottsville aquifer

system beneath the proposed disposal facilities indicate unconfined to confined, fractured, and extremely anisotropic conditions. The Pottsville aquifer system functions as a series of confined to semi-confined water producing zones (aquifers) because of the large permeability contrasts within the strata (Stricklin, 1989). Depth to groundwater varies significantly across the Site and is wholly dependent on encountering a fractured interval or zone of fissile, iron-claystone.

Monitoring wells installed at the mine overburden/top of rock interface monitor the quality of water passing to the Pottsville Formation. This water quality itself can be highly variable and enriched in trace metals owing to the heterogeneity of mine backfill deposits and mineralogy (e.g., clay minerals and sulfides). Based on published data, groundwater quality produced from the Pottsville Formation can be characterized by high concentrations of sulfate, iron, and other trace metals (Jennings and Cook, 2010). Trace metals in Pottsville Formation groundwater are associated with sulfide minerals contained in organic-rich strata (e.g., mudstones and coal seams) and siliceous/carbonate healed fractures and joints. Trace element enrichment is likely the result of migrating hydrothermal fluids generated during the late Paleozoic Allegheny orogeny (Diehl et al., 2004). Arsenic, antimony, molybdenum, selenium, copper, thallium, and mercury are elevated in Warrior Basin coal strata (Goldhaber et al., 2002).

3.2.3 Flow Interpretation

Groundwater flow at the Site is a subdued replica of the natural topography where gravity is the dominant force driving flow. Groundwater flows from higher topographic elevations north of the Site to lower topographic elevations to the south and generally, towards the Mulberry Fork of the Black Warrior River. Mine spoil layering and complex Pottsville Formation lithofacies contribute to the vertical and horizontal heterogeneity present within the aquifer system and overlying saturated mine spoils. This heterogeneity focuses groundwater flow along more permeable pathways, such as parallel to coal seams and bedding plains, or along vertical or sub-vertical discontinuities in the rock fabric. Semi-annual sampling event groundwater elevations are discussed in Section 4.0.

3.3 GROUNDWATER MONITORING SYSTEM

Pursuant to § 257.91 and ADEM Admin. Code r. 335-13-15-.06(2), Plant Gorgas has installed a groundwater monitoring well network to evaluate groundwater quality within the uppermost aquifer. The certified groundwater monitoring system for the Plant Gorgas CCR Landfill is designed to monitor groundwater flow passing the waste boundary of the CCR unit. Wells were sited to serve as upgradient or

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, and piezometer (water-level only). 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.

On April 13, 2023, the ground surface and top of casing elevations for all onsite wells were resurveyed by a licensed Professional Land Surveyor. The location and designation of site wells are presented in **Figure 5, Monitoring Well Location Map. Table 1, Compliance Monitoring Well Network Details**, summarizes the monitoring well construction details, surveyed elevations, and design purpose for the Plant Gorgas CCR Landfill.

3.3.1.1 Upgradient Wells

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

Monitoring well locations MW-1 through MW-4 serve as upgradient locations for the CCR Landfill. Upgradient wells are screened within the same hydrostratigraphic interval as downgradient locations and are representative of background groundwater quality at the Site. Groundwater generally flows from higher topographic elevations north of the Site to lower topographic elevations to the south. Upgradient wells are located north of the CCR Landfill as determined by water level monitoring and potentiometric surface maps constructed for the Site.

3.3.1.2 Downgradient Wells

Monitoring well locations MW-5 through MW-8 serve as downgradient locations for the Gorgas CCR Landfill. Downgradient locations are located lateral to and south of the CCR Landfill as determined by water level monitoring and potentiometric surface maps.

3.3.1.3 Piezometers

One piezometer, identified as MW-9R, is located immediately east of the CCR Landfill and is currently designated as a water level only piezometer. Additional assessment of this well is required before it can be considered for inclusion into the facility's groundwater monitoring network. The location of piezometer MW-9R relative to the CCR Landfill is depicted on **Figure 6, Potentiometric Surface Contour Map (February 20, 2023)** for reference.

3.3.1.4 Monitoring Well Replacement and Abandonment

Monitoring well replacement or abandonment activities were not performed during the first 2023 semi-annual monitoring 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 upgradient and downgradient well and analyzed for the constituents listed in Appendix III and IV prior to October 17, 2017. Background groundwater monitoring was performed at the Gorgas CCR Landfill from April 2016 through October 2017. Groundwater sampling for the first detection monitoring event after the background period was performed in November 2017.

Based on results of the 2017 Annual Groundwater and Corrective Action Monitoring Report, APC initiated an assessment monitoring program on January 15, 2018. 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 February 2018, within 90 days of initiating the assessment monitoring program. Semi-annual assessment sampling has continued since the conclusion of background sampling and initiation of assessment monitoring.

3.4.1 Available Monitoring Data

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

3.4.2 Historical Groundwater Flow

Historical groundwater elevations and potentiometric surface maps show that groundwater flow patterns are consistent across monitoring events and as described in **Section 3.2.3**. 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 groundwater protection standards (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 for groundwater on a semi-annual basis. The spacing between sampling events is sufficient to ensure sampling events yield independent groundwater samples and generally represent different climatic or meteorological seasons that create a degree of natural variability in groundwater quality.

During routine semi-annual monitoring events, all compliance wells are sampled and analyzed for Appendix III and Appendix IV constituents. Additional general chemistry constituents (major ions and anions) and monitored natural attenuation targeted parameters are now being collected routinely. These non-compliance parameters will be periodically analyzed to explore seasonal changes in geochemical facies in Site groundwater.

The following subsections summarize the sequential steps and process for the sampling, handling and 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 Gorgas 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. Groundwater samples are subsequently 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 for the monitoring events are included in **Appendix C, Laboratory and Field Records**.

3.5.2 Sample Preservation and Handling

Groundwater samples were collected in 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 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 or Pace Analytical Services, LLC (Pace) in Greensburg, Pennsylvania. Both APCEL and Pace are accredited by National Environmental Laboratory Accreditation Program (NELAP) and maintain a NELAP certification for all parameters analyzed. **Table 2, Parameters and Reporting Limits**, lists assessment monitoring constituents analyzed from Site groundwater samples. Groundwater data and COC records for the monitoring event is presented in **Appendix C.**

3.5.5 Monitoring Period Sampling Events

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 monitoring period. The first 2023 Semi-Annual Assessment Monitoring sampling events took place between February 20 and 23, 2023.

Groundwater samples were analyzed for the full list of Appendix III and Appendix IV parameters during each Assessment Monitoring event. 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 ELEVATIONS AND FLOW

During the first semi-annual sampling event, groundwater elevations ranged from 320.13 to 419.16 feet NAVD88 (feet above reference 1988 North American Vertical Datum) in CCR Landfill monitoring wells. **Figure 6**, **Potentiometric Surface Contour Map (February 20, 2023)** depicts groundwater elevations and inferred groundwater flow direction.

As shown on **Figure 6**, the general direction of lateral groundwater flow is to the southeast, consistent with historic observations. As indicated by groundwater elevations from paired wells MW-12 and MW-12V at the nearby Bottom Ash Landfill, an upward vertical gradient appears to exist between shallow and deeper flow zones. This indicates (1) both vertically confining conditions exist and (2) deeper, older groundwater is upward flowing. Recent available groundwater elevation data collected from the first 2023 semi-annual sampling event has been tabulated and included in **Table 3, Groundwater Elevations Summary**. All available groundwater elevation data recorded since 2015 have been tabulated and included in **Appendix B.**

4.1 GROUNDWATER FLOW VELOCITY CALCULATIONS

Because the geology at the CCR Landfill is not homogeneous or isotropic with respect to groundwater flow, groundwater velocity calculations using derivations of Darcy's Law, or other methods, will not fully represent the spatial variability across the site. Groundwater flow velocity calculations are provided as a general estimate of groundwater flow velocity at the site based on available information and assumptions described below.

The hydrogeologic characteristics of mine spoils and fractured rock can produce preferential groundwater flow paths, so groundwater velocity is much more variable than in uniform porous media such as sand. These flow paths correspond to more permeable lenses in mine spoil and fractures, zones of fracture concentration, bedding planes, and other discontinuities in the rock. Therefore, groundwater flow velocity at the Site will be highly variable.

Slug testing provided horizontal hydraulic conductivities for the uppermost aquifer between 5.11×10^{-3} centimeters per second (cm/sec) and 2.47×10^{-4} cm/sec. The average hydraulic conductivity value used in the calculations is 2.83×10^{-3} cm/sec or 8.01 feet/day. An estimated effective porosity of 0.15 is used in the flow rate calculations. The hydraulic gradient was calculated between well pairs shown in **Appendix D, Horizontal Groundwater Flow Velocity 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. **Appendix D** presents the horizontal flow velocities calculated using groundwater elevation data collected from the first 2023 semi-annual assessment monitoring event.

5.0 EVALUATION OF GROUNDWATER QUALITY DATA

During each sampling event, quality assurance/quality control samples (QA/QC) were collected at an interval of one 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 RPD 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 to attempt to determine the cause of the difference and potentially result in qualified data. **Table 4**, **Relative Percent Difference Calculations,** provides the RPDs for sample and sample duplicates during the first semi-annual monitoring event of 2023. All RPDs in this reporting period were reported as being below 20%.

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 resample plan, are used to evaluate calcium, chloride, fluoride, sulfate, and total dissolved solids (TDS). Interwell prediction limits, combined with a 1-of-2 verification resample plan, are used for boron and pH to determine whether there has been an SSI over background groundwater quality. Intrawell prediction limits use screened historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background to identify SSIs over background. 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 October 2017 Statistical Analysis Plan, which was updated in the September 2019 data screening evaluation. 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 used in the statistical analysis. The reporting limit used 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 monitoring, Appendix IV constituents are sampled semi-annually, and concentrations are 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 (UTL) 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 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 first semi-annual monitoring events in 2023 were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017) and revised in September 2019 data screening evaluation performed by Groundwater Stats Consulting. Appendix III statistical analysis was performed to determine if constituents had 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 Analysis**, 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**. It should be noted that recent background concentrations for select constituents (**Table 5**) show values that exceed their respective GWPS concentration. These occurrences are a result of recent background concentrations that have not yet been integrated into the Fall 2023 GWPS update. The next semi-annual report should reflect the appropriate changes to the GWPS.

Statistical analysis of Appendix IV data presented in **Appendix E** did not identify any Appendix IV SSLs during the first semi-annual monitoring event for 2023. **Table 6**, **First Semi-Annual Monitoring Event Analytical Summary** provides a summary of all constituent concentrations for the 2023 first semi-annual monitoring event.

6.0 ALTERNATE SOURCE DEMONSTRATION

Section 257.95(g)(3)(ii) and ADEM Admin. Code r. 335-13-15-.06(6)(g)4.(ii) allow the owner or operator to demonstrate that a source other than the CCR unit has caused an SSL and that the SSL was the result of an alternate source, or that the SSL resulted from errors in sampling, analysis, statistical evaluation, or natural variation in groundwater quality. An ASD was prepared for lithium and submitted to ADEM in January 2019.

As discussed in the ASD report, the apparent SSL is the result of the presence of mine spoils and natural groundwater chemistry variability not accounted for by Site statistics. Analytical data from the first semi-annual monitoring event in January 2018 were statistically analyzed in accordance with the Professional Engineer (PE)-certified Statistical Analysis Plan (October 2017) and updated in September 2019 data screening evaluation performed by Groundwater Stats Consulting. A lithium statistical limit of 0.419 mg/L was calculated using the pool of all available upgradient well data in the updated September 2019 data screening evaluation. Consequently, there are no historical exceedances of lithium associated with the CCR Landfill.

The ASD satisfies Federal rules and precludes the need to complete an ACM under § 257.96. However, ADEM has yet to approve the ASD for lithium, and consequently an ACM is required according to the State rules (ADEM Admin. Code r. 335-13-15-.06(6)(g)5.). APC amended the current Plant Gorgas ACM that was prepared under § 257.96, ADEM Admin. Code r. 335-13-15-.06(7), and AO No. 18-096-GW to include the CCR Landfill in February 2020.

7.0 GROUNDWATER DELINEATION

As required by Part E of the Order (AO No. 18-096-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 (November 13, 2018). The primary purpose of this plan was to identify the horizontal and vertical extent of groundwater impacts defined by EPA Appendix IV groundwater protection standards.

As described in the Facility Plan for Groundwater Investigation for the Plant Gorgas CCR Landfill, source characterization and groundwater delineation efforts are not required pursuant to applicable rules because GWPS are not exceeded at the CCR Landfill. SSLs of the Appendix IV constituent lithium were identified in one well while in assessment monitoring. Consequently, an ASD was submitted to ADEM for lithium SSLs above the GWPS in January 2019. However, since that submittal, SSLs have not been observed at the Site. Pending ADEM review and approval of the ASD, APC will continue assessment monitoring at the CCR landfill.

APC completed an ACM report submitted to ADEM in June 2019 to address the occurrence of constituents in groundwater at SSLs at the Plant Gorgas Ash Pond and Gypsum Pond. In February 2020, Alabama Power revised the ACM to include the CCR Landfill. As described above, there have not been any SSLs at the Site since 2018, and therefore, does not warrant the implementation of groundwater corrective action remedies.

8.0 SUMMARY AND CONCLUSIONS

Based on the results of statistical analysis presented in this report, the CCR Landfill remains in assessment monitoring. The certified compliance monitoring well network is sampled on a semi-annual basis and groundwater samples analyzed for all Appendix III and IV parameters. Statistical evaluations of the first 2023 semi-annual assessment monitoring data did not identify SSLs of Appendix IV constituents.

An ASD was prepared to address the lithium GWPS exceedances at compliance well MW-6 and submitted to ADEM in January 2019. In addition, since the submittal of this ASD, SSLs have not been observed at the Site. However, ADEM has not yet approved the ASD, so APC has amended the current Plant Gorgas ACM to include the CCR Landfill. The pending ASD review decision by ADEM has direct implications on future actions for the site. If approved, the site will remain in assessment monitoring and corrective actions will not necessitate further evaluation.

In accordance with § 257.95(d) and Alabama Admin. Code r. 335-13-15-.06(6)(d), APC will continue semi-annual assessment monitoring. The following future actions will be taken or are recommended for the site:

- Conduct the second 2023 semi-annual assessment monitoring event in the fall of 2023 and submit the Annual Groundwater Monitoring and Corrective Action Report summarizing the findings to ADEM by January 31, 2024.

9.0 REFERENCES

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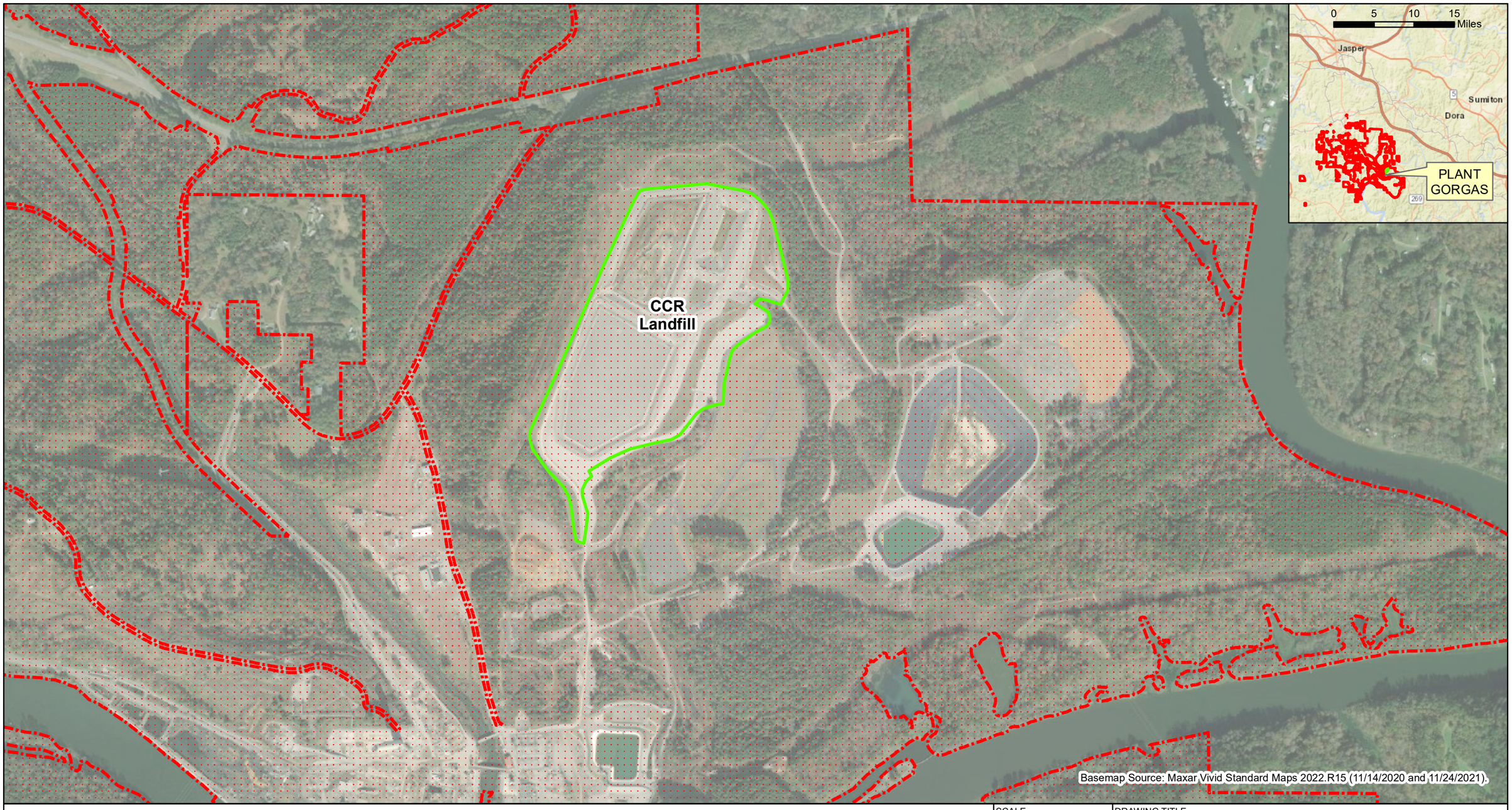
Figures



Legend

- CCR Landfill Boundary (Approximate)
- Property Boundary (Approximate)

N

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

SCALE	1:9000
DATE	6/13/2023
DRAWN BY	KWR
CHECKED BY	GBD

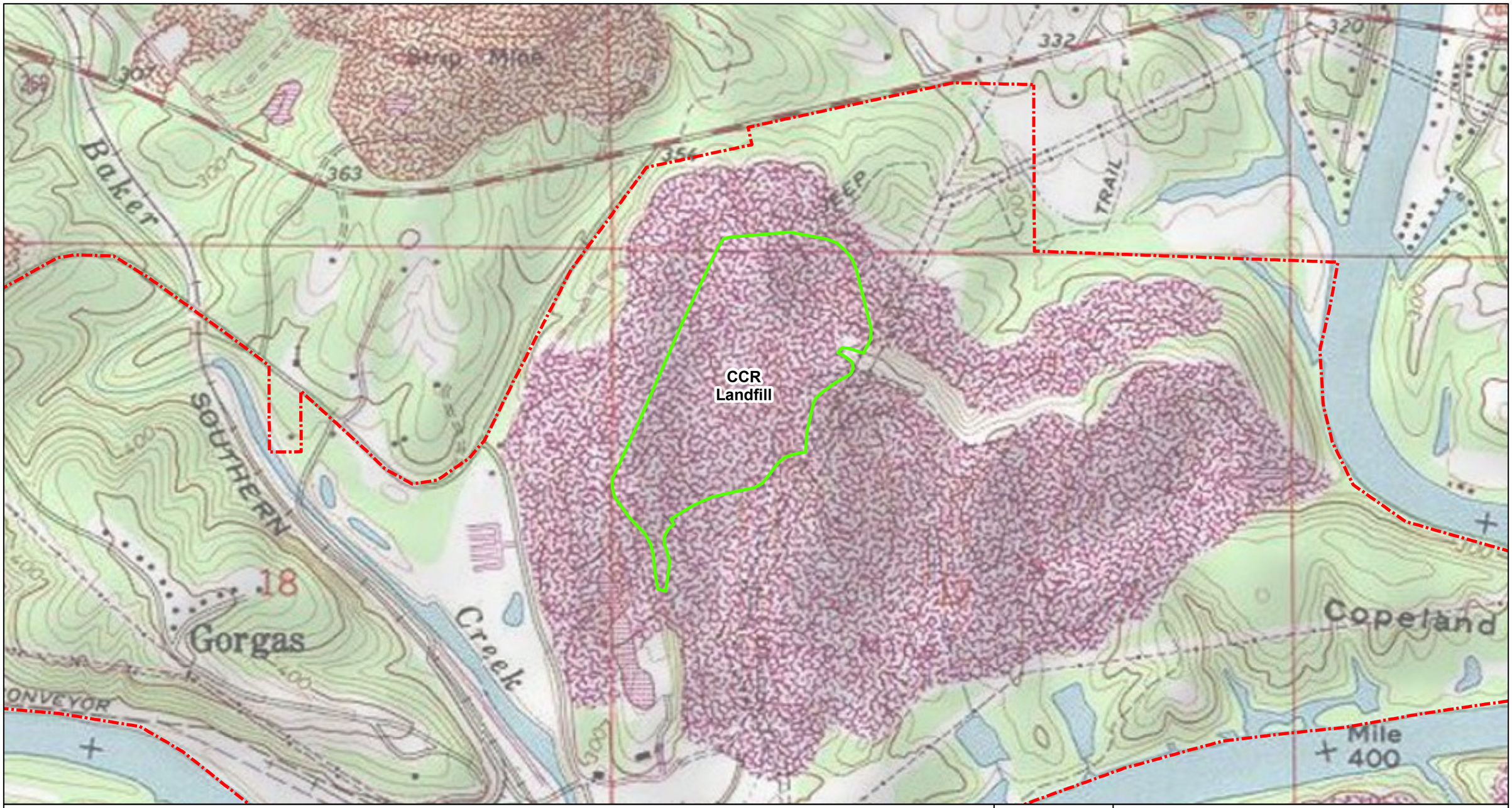
DRAWING TITLE

SITE LOCATION MAP
PLANT GORGAS CCR LANDFILL

FIGURE NO

FIGURE 1

Southern Company



Legend

- Property Boundary (Approximate)
- CCR Landfill Boundary (Approximate)

N

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

SCALE	1:9000
DATE	12/18/2019
DRAWN BY	KAR
CHECKED BY	GBD

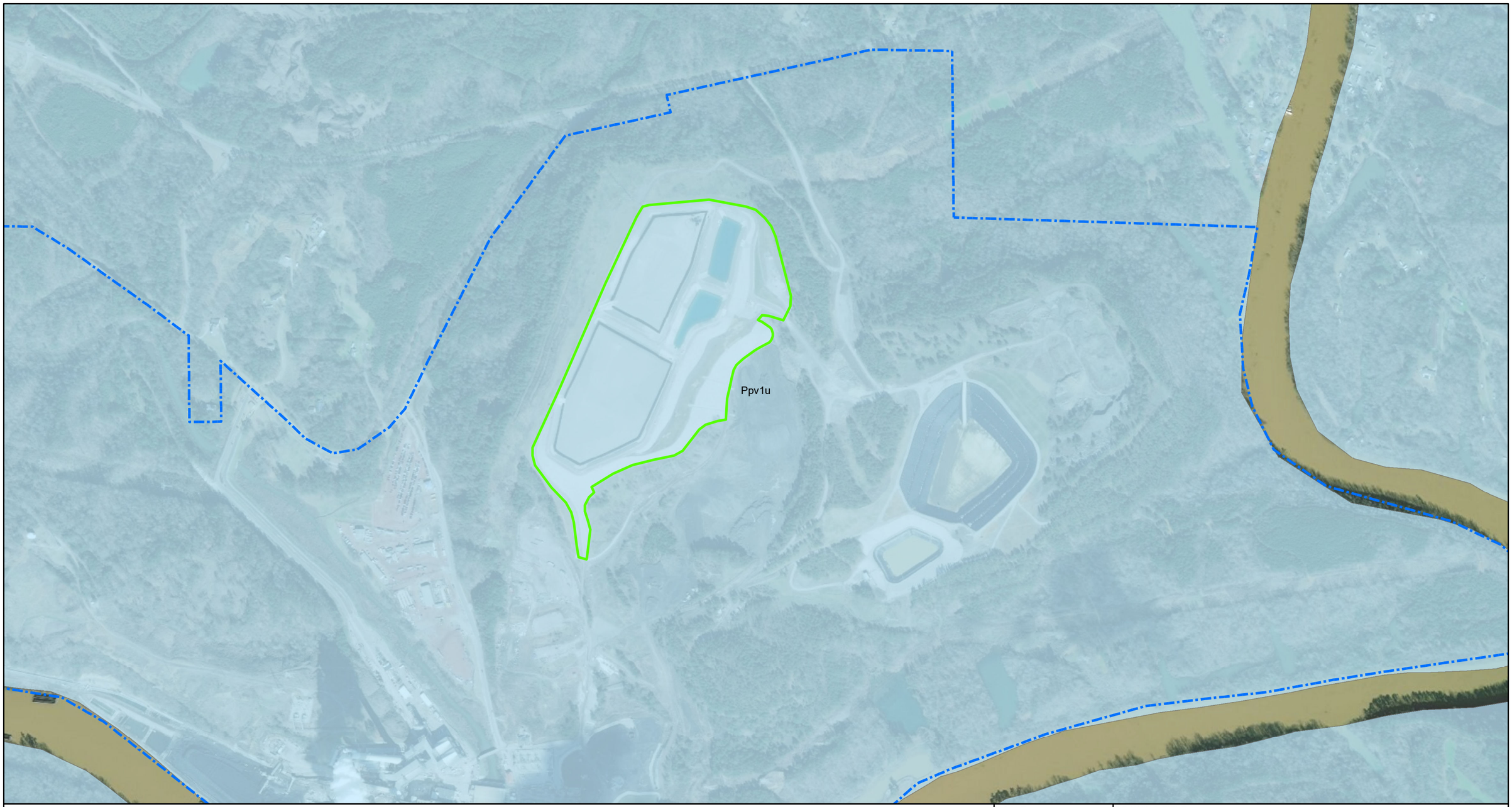
DRAWING TITLE

SITE TOPOGRAPHIC MAP
PLANT GORGAS CCR LANDFILL

FIGURE NO

FIGURE 2

Southern Company



Legend

Property Boundary (Approximate)

CCR Landfill Boundary (Approximate)

Geologic Units

Pottsville Formation (upper part), Appalachian Plateaus (Ppv1u)

N

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

SCALE	1:9000
DATE	12/18/2019
DRAWN BY	KWR
CHECKED BY	GBD

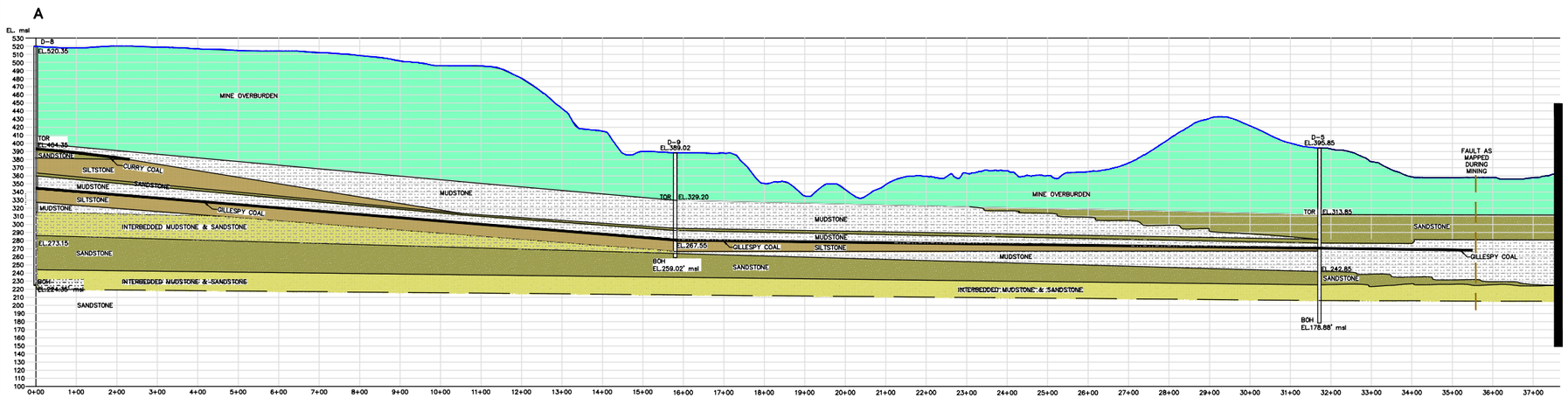
DRAWING TITLE

SITE GEOLOGIC MAP
PLANT GORGAS CCR LANDFILL

FIGURE NO

FIGURE 3

Southern Company



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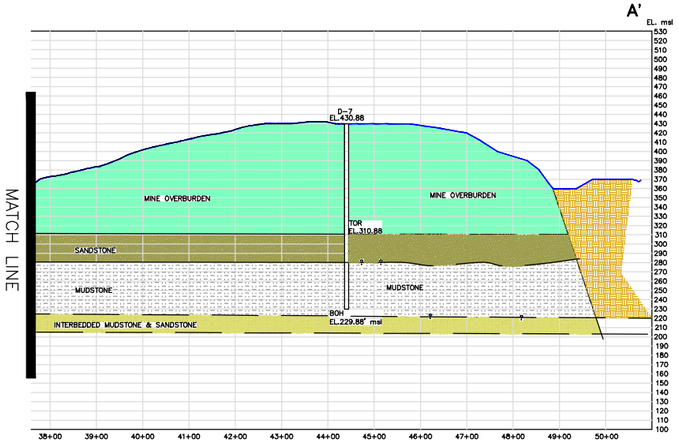
HORIZ: 1"= 200'



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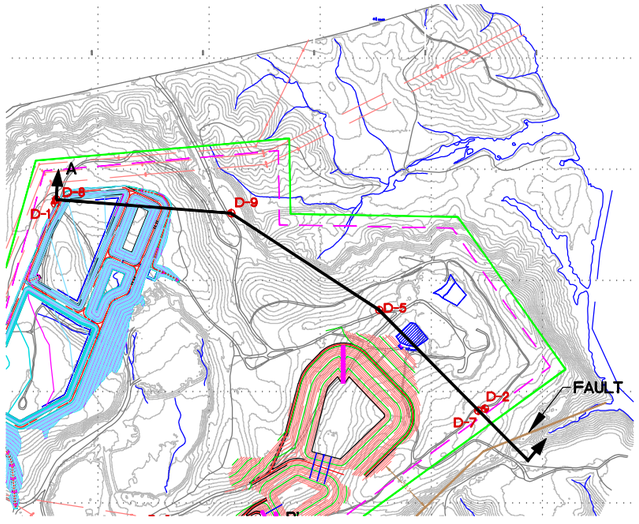

STATE PLAN
NAD 27
WEST ZONE

GRAPHIC SCALE
800 0 400 800 1600 3200
(IN FEET)
1 inch = 800ft.

REVISION	DATE

REVISION	DATE

REVISION	DATE
0	07/07/2017

ISSUED FOR REPORT

Southern Company Services
Engineering and Construction Services
FOR
Alabama Power Company

PLANT GORGAS
UNIT 8, UNIT 9 AND UNIT 10
CCB STORAGE FACILITY
GEOLOGIC CROSS SECTION A–A'

BY	CHK'D	CIVIL APPR	ELECT APPR	I/C APPR	MECH APPR	DISC MGR

BY	CHK'D	CIVIL APPR	ELECT APPR	I/C APPR	MECH APPR	DISC MGR

BY	CHK'D	CIVIL APPR	ELECT APPR	I/C APPR	MECH APPR	DISC MGR
GBD	GBD	SCB	XXX	XXX	XXX	XXX

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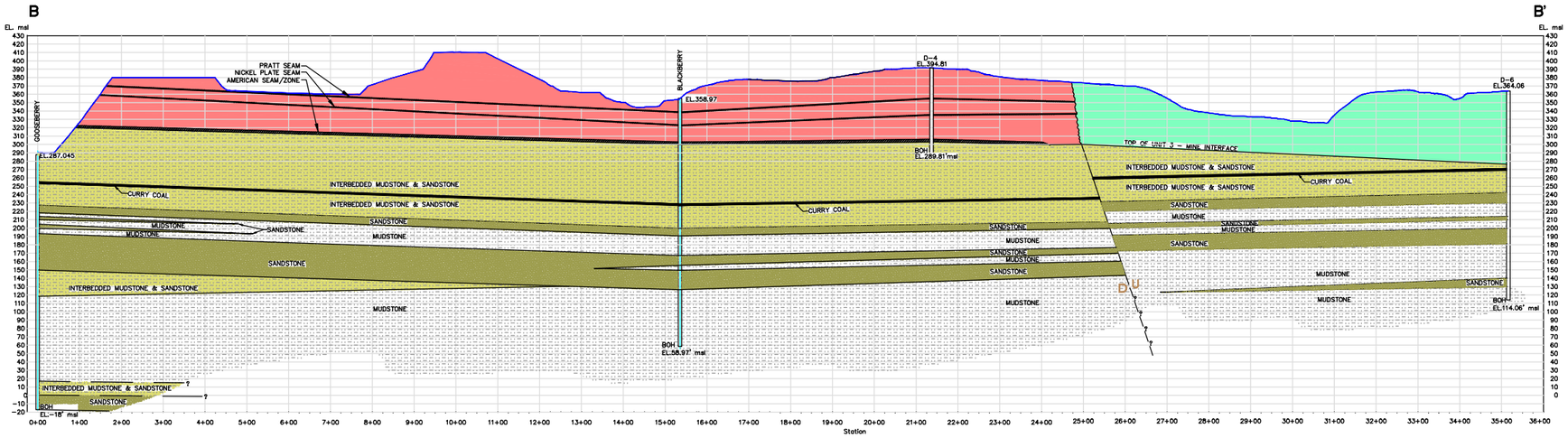
AS SHOWN	**FIGURE 4A**	1	FINAL	0

ANSI C: 22x17 Acad2013



SECTION B–B'
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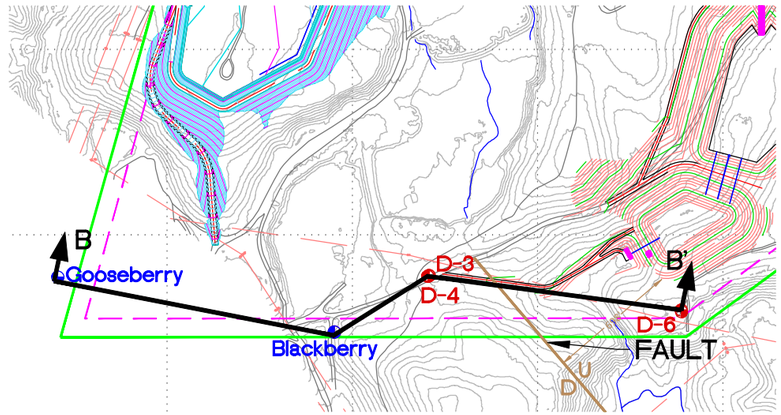
HORIZ: 1"= 200'



STATE PLAN
NAD 27
WEST ZONE

GRAPHIC SCALE
500 0 250 500 1000 2000
(IN FEET)
1 inch = 500ft.

REVISION	DATE

REVISION	DATE

REVISION	DATE
0	07/07/2017
ISSUED FOR REPORT	

BY	CHK'D	CIVIL APPR	ELECT APPR	I/C APPR	MECH APPR	DISC MGR

BY	CHK'D	CIVIL APPR	ELECT APPR	I/C APPR	MECH APPR	DISC MGR

BY	CHK'D	CIVIL APPR	ELECT APPR	I/C APPR	MECH APPR	DISC MGR
GBD	GBD	SCB	XXX	XXX	XXX	XXX

Southern Company Services
Engineering and Construction Services
FOR
Alabama Power Company

PLANT GORGAS
UNIT 8, UNIT 9 AND UNIT 10
CCB STORAGE FACILITY
GEOLOGIC CROSS SECTION B–B'

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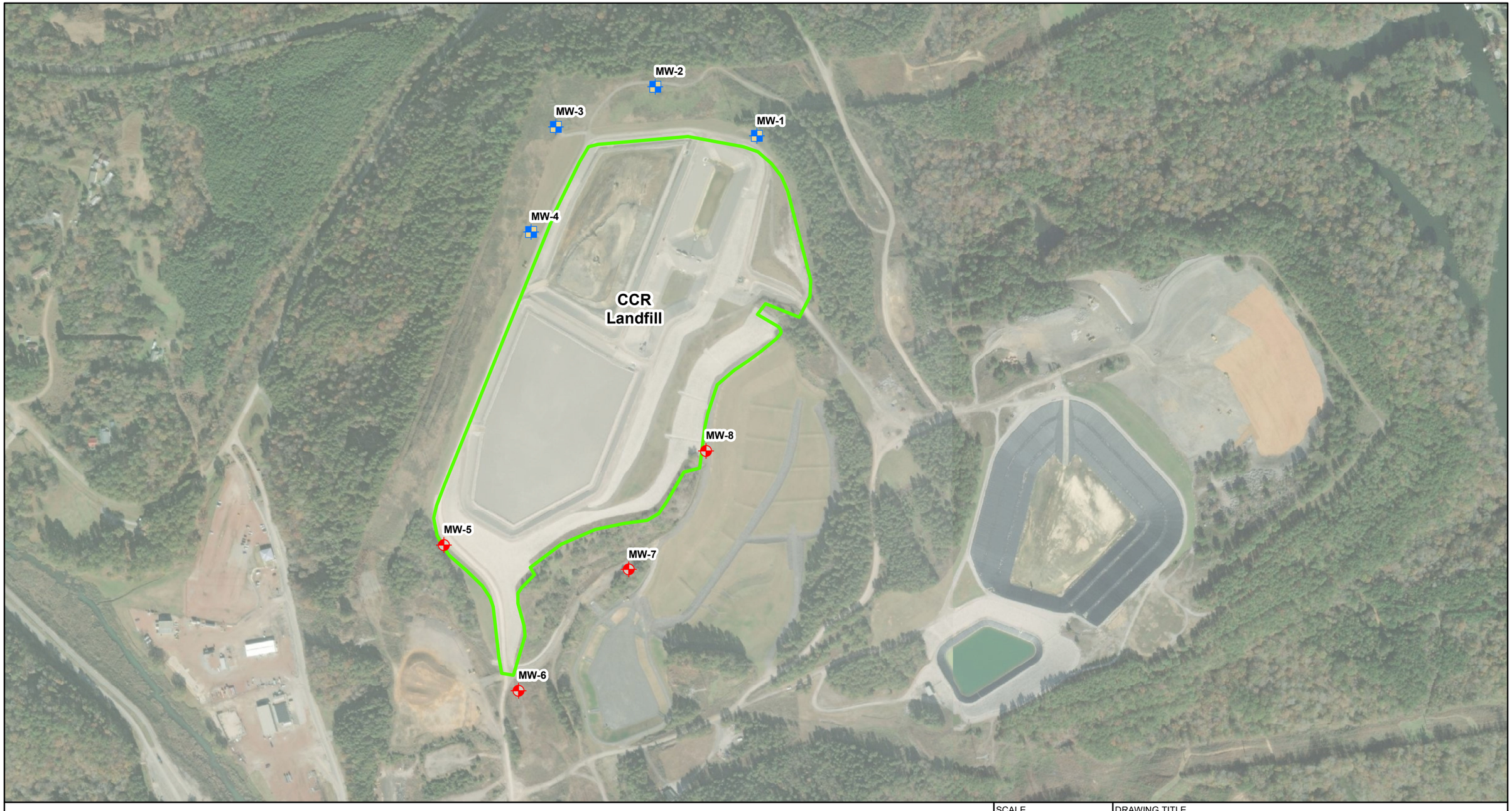
AS SHOWN	**FIGURE 4B**	1	FINAL	0

ANSI C: 22x17 Acad2013



Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Gorgas CCR Landfill Boundary (Approximate)

N

0 500 1,000 2,000 Feet

NOTE: Basemap Source: Maxar, 11/14/2020 (east) and 11/24/2021 (west).

SCALE	1:6000
DATE	5/26/2023
DRAWN BY	KWR
CHECKED BY	GBD

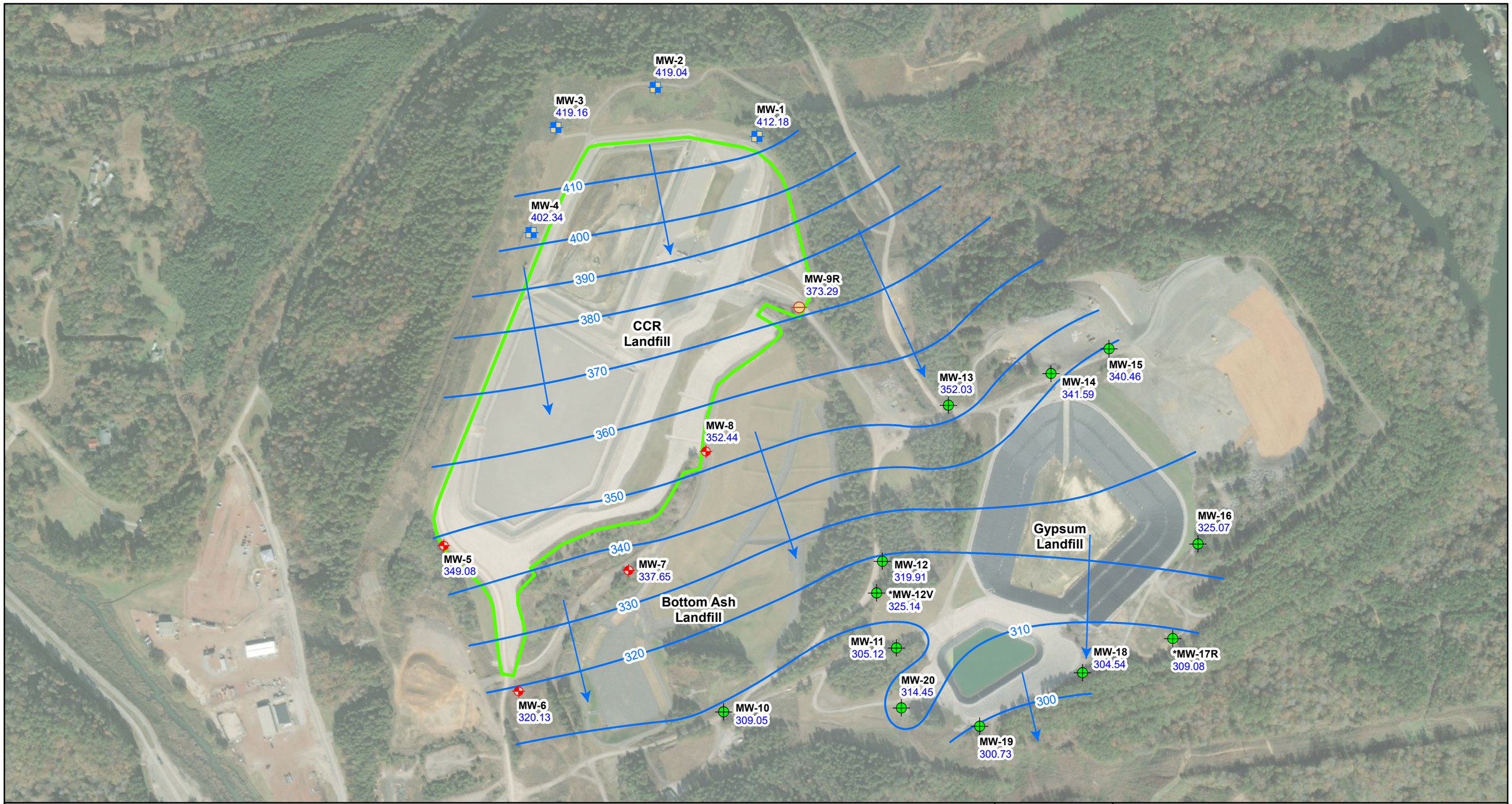
DRAWING TITLE

MONITORING WELL LOCATION MAP
PLANT GORGAS CCR LANDFILL

FIGURE NO

FIGURE 5

Southern Company



Legend

- Downgradient Monitoring Well
- Upgradient Monitoring Well
- Monitoring Well
- Piezometer
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundater Flow Direction
- CCR Landfill Boundary (Approximate)
- **MW-1** Well ID
  412.18 Groundwater Elevation

N

0 500 1,000 2,000 Feet

NOTES:
1. NAVD88 indicates North American Vertical Datum of 1988.
2. MW-10, screened across American Coal Seam, was factored into contouring.
3. *MW-12V and MW-17R are screened entirely in rock and were not factored into contouring.
4. Basemap Source: Maxar, 11/14/2020 (east) and 11/24/2021 (west).

SCALE	1:6000
DATE	5/26/2023
DRAWN BY	KWR
CHECKED BY	AWH

DRAWING TITLE

POTENTIOMETRIC SURFACE CONTOUR MAP FEBRUARY 20, 2023 PLANT GORGAS CCR LANDFILL

FIGURE NO

FIGURE 6

Southern Company

Tables

Southern Company

Table 1. - Compliance Monitoring Well Network Details
Plant Gorgas CCR Landfill

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											
MW-1	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65821266	-87.1908573	499.29	502.71	108.25	405.19	395.19	10	1/15/2014
MW-2	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65892938	-87.1926079	499.32	502.47	94.47	418.72	408.72	10	10/23/2014
MW-3	Upgradient	Mine Spoil - Pottsville Fm Interface	33.65835409	-87.1943305	522.80	526.15	119.11	417.70	407.70	10	10/23/2014
MW-4	Upgradient	Mine Spoil - Pottsville Fm Interface	33.6568369	-87.1947598	516.82	518.30	128.84	400.52	390.52	10	2/19/2012
MW-5	Downgradient	Mine Spoil - Pottsville Fm Interface	33.6523226	-87.1962867	471.68	474.90	137.30	348.08	338.08	10	10/28/2014
MW-6	Downgradient	Mine Spoil - Pottsville Fm Interface	33.65020848	-87.1950016	412.07	415.31	128.97	296.47	286.47	10	10/29/2014
MW-7	Downgradient	Mine Spoil - Pottsville Fm Interface	33.65195545	-87.1930942	391.98	394.69	73.82	331.38	321.38	10	10/29/2014
MW-8	Downgradient	Mine Spoil - Pottsville Fm Interface	33.6536690	-87.1917540	413.87	415.83	72.39	354.97	344.97	10	1/16/2014
MW-9R	Piezometer	Mine Spoil - Pottsville Fm Interface	33.65574533	-87.1901370	500.23	503.27	135.24	378.73	368.73	10	7/27/2017

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

(1) A well construction log for piezometer MW-9R could not be located.

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Table 2. Parameters And Reporting Limits

Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

Appendix III Parameters			
Parameters	**Analytical Methods**	**Reporting Limits**	**Units of Measure**
Boron	EPA 200.7	0.1015	mg/L
Calcium	EPA 200.7	4.06-40.599998	mg/L
Chloride	SM4500Cl E	1	mg/L
Fluoride	SM4500F G 2017	0.125	mg/L
pH_Field	Field Sampling	NA	SU
Sulfate	SM4500SO4 E 2011	80-160	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	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	0.918-1.11	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

Table 3. Groundwater Elevations Summary

Plant Gorgas CCR Landfill
02/20/2023 - 02/20/2023

Well	Measurement Date	TOC Elevation (ft. NAVD)	Depth To Water (ft. BTOC)	Groundwater Elevation (ft. NAVD)
MW-1	02/20/2023	502.71	90.53	412.18
MW-2	02/20/2023	502.47	83.43	419.04
MW-3	02/20/2023	526.15	106.99	419.16
MW-4	02/20/2023	518.30	115.96	402.34
MW-5	02/20/2023	474.90	125.82	349.08
MW-6	02/20/2023	415.31	95.18	320.13
MW-7	02/20/2023	394.69	57.04	337.65
MW-8	02/20/2023	415.83	63.39	352.44

Notes:
ft. = feet; ft. NAVD = elevation in feet, referenced to North American Vertical Datum (1988); TOC = top of casing; BTOC = below top of casing; N/A = Not Acquired

Table 4. Relative Percent Difference (RPD) Calculations

Plant Gorgas CCR Landfill
02/20/2023 - 02/20/2023

MW-1				
Sample Date = 2/20/2023				
Analyte	**Units**	**Original Result**	**Duplicate Result**	**RPD (%)**
Calcium	mg/L	151	159	5.16%
Chloride	mg/L	2.05	2	2.47%
Fluoride	mg/L	0.221	0.186	17.20%
Sulfate	mg/L	1520	1430	6.10%
Arsenic	mg/L	0.00027	0.00027	1.84%
Barium	mg/L	0.0102	0.0105	2.90%
Cadmium	mg/L	0.00185	0.00181	2.19%
Cobalt	mg/L	0.0665	0.0678	1.94%
Lithium	mg/L	0.0241	0.0243	0.83%
Selenium	mg/L	0.00258	0.00262	1.54%

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 5. Summary of Background Levels and Groundwater Protection Standards

Plant Gorgas CCR Landfill

Appendix IV Analytes			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.0165	2
Beryllium	mg/L	0.0121	0.0185
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.49	1.07
Fluoride	mg/L	0.63	4
Lead	mg/L	0.00108	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.0209	0.05
Thallium	mg/L	0.000226	0.002
Combined Radium 226 + 228	pCi/L	1.47	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).

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

Field Parameters								
Hydraulic Location	Well	Sample Date	Conductivity uS/cm	DO mg/L	ORP mv	pH_Field SU	Field Temperature C	Turbidity NTU
Upgradient	MW-1	02/20/2023	2297.01	0.95	361.14	5.07	19.59	0.73
Upgradient	MW-2	02/20/2023	1773	0.82	72.91	6.24	18.95	0.41
Upgradient	MW-3	02/20/2023	3276.9	6.19	231.95	6.01	20.34	1.21
Upgradient	MW-4	02/21/2023	3184.95	3.15	219	6.35	19.61	0.72
Downgradient	MW-5	02/21/2023	3355.12	0.79	-7.67	6.5	19.77	4.48
Downgradient	MW-6	02/22/2023	2795.15	0.45	195.75	4.98	21.32	6.33
Downgradient	MW-7	02/21/2023	2577.99	0.94	-6.78	6.72	19.16	0.53
Downgradient	MW-8	02/21/2023	2722.64	0.32	1.47	6.75	20.26	7.56

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.
6. NC = value not detected with alkalinity calculation

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

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	TDS mg/L
Upgradient	MW-1	02/20/2023	<0.03	170	2.05	0.221	5.07	1520	2280
Upgradient	MW-2	02/20/2023	<0.03	165	1.7	0.267	6.24	767	1420
Upgradient	MW-3	02/20/2023	<0.03	234	1.94	0.379	6.01	2110	3230
Upgradient	MW-4	02/21/2023	0.0416 J	239	1.58	0.415	6.35	1930	3160
Downgradient	MW-5	02/21/2023	0.0306 J	355	5.25	0.319	6.5	2210	3310
Downgradient	MW-6	02/22/2023	0.0381 J	266	4.37	0.173	4.98	1870	2790
Downgradient	MW-7	02/21/2023	0.0664 J	299	6.12	0.216	6.72	1450	2220
Downgradient	MW-8	02/21/2023	0.0617 J	317	4.86	0.212	6.75	1510	2370

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.
6. NC = value not detected with alkalinity calculation

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

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	MW-1	02/20/2023	<0.000508	0.000298	0.00873	<0.000406	0.00154	<0.000203	0.0587	0.221
Upgradient	MW-2	02/20/2023	<0.000508	0.000231	0.0104	<0.000406	8.1e-005 J	<0.000203	0.0163	0.267
Upgradient	MW-3	02/20/2023	<0.000508	0.000227	0.00729	<0.000406	0.00136	0.000297 J	0.00375	0.379
Upgradient	MW-4	02/21/2023	<0.000508	<8.1e-005	0.0105	<0.000406	<6.8e-005	<0.000203	<6.8e-005	0.415
Downgradient	MW-5	02/21/2023	<0.000508	0.000198 J	0.0107	<0.000406	<6.8e-005	<0.000203	0.000976	0.319
Downgradient	MW-6	02/22/2023	<0.000508	0.0019	0.0118	0.00128	0.00194	<0.000203	0.487	0.173
Downgradient	MW-7	02/21/2023	<0.000508	0.00162	0.0131	<0.000406	<6.8e-005	<0.000203	0.00381	0.216
Downgradient	MW-8	02/21/2023	<0.000508	0.000567	0.0126	<0.000406	<6.8e-005	<0.000203	0.00585	0.212

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.
6. NC = value not detected with alkalinity calculation

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

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**	**Combined Radium 226 + 228 pCi/L**
Upgradient	MW-1	02/20/2023	<6.8e-005	0.0233	<0.0003	0.000159 J	0.00228	<6.8e-005	0.36 U
Upgradient	MW-2	02/20/2023	0.000135 J	0.0418	<0.0003	<0.005075	<0.000508	<6.8e-005	0.837 U
Upgradient	MW-3	02/20/2023	<6.8e-005	0.065	<0.0003	0.000135 J	0.0125	<6.8e-005	0.234 U
Upgradient	MW-4	02/21/2023	<6.8e-005	0.0431	<0.0003	0.000274	0.00248	<6.8e-005	0.3 U
Downgradient	MW-5	02/21/2023	<6.8e-005	0.0939	<0.0003	0.000937	0.00172	<6.8e-005	0.275 U
Downgradient	MW-6	02/22/2023	0.000115 J	0.0325	<0.0003	0.000164 J	0.00162	0.000138 J	3.75
Downgradient	MW-7	02/21/2023	<6.8e-005	0.0892	<0.0003	0.000885	<0.000508	<6.8e-005	0.789 U
Downgradient	MW-8	02/21/2023	<6.8e-005	0.119	<0.0003	0.000582	<0.000508	<6.8e-005	2.19

Notes:
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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.
6. NC = value not detected with alkalinity calculation

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Chloride mg/L	Nitrate Nitrite mg/L as N	Sulfate mg/L	Aluminum mg/L	Calcium mg/L	Iron Total mg/L	Potassium mg/L	Magnesium Total mg/L
Upgradient	MW-1	02/20/2023	2.05	0.891	1520	0.112	170	<0.00812	6.64	321
Upgradient	MW-2	02/20/2023	1.7	<0.2	767	<0.00609	165	0.727	5.27	187
Upgradient	MW-3	02/20/2023	1.94	2.46	2110	0.0298 J	234	<0.00812	6.13	446
Upgradient	MW-4	02/21/2023	1.58	0.244 J	1930	<0.00609	239	<0.00812	7.28	397
Downgradient	MW-5	02/21/2023	5.25	<0.2	2210	<0.00609	355	2.46	5.74	359
Downgradient	MW-6	02/22/2023	4.37	<0.2	1870	0.311	266	3.6	5.86	354
Downgradient	MW-7	02/21/2023	6.12	<0.2	1450	<0.00609	299	2.15	6.2	281
Downgradient	MW-8	02/21/2023	4.86	<0.2	1510	<0.00609	317	1.37	7.39	321

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.
6. NC = value not detected with alkalinity calculation

Southern Company

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

General Chemistry and MNA Parameters										
Hydraulic Location	Well	Sample Date	Manganese Total mg/L	Sodium mg/L	Silicon mg/L	Silica mg/L	Carbon, Total Organic mg/L	Alkalinity Total as CaCO3 mg CaCO3/L	Carbonate Alkalinity as CaCO3 mg CaCO3/L	Bicarbonate Alkalinity as CaCO3 mg CaCO3/L
Upgradient	MW-1	02/20/2023	9	32	11.6	24.6	4.53	21.4	NC	21.4
Upgradient	MW-2	02/20/2023	4.15	16.3	5.18	11.1	8.44	283	NC	283
Upgradient	MW-3	02/20/2023	0.447	44.9	10.3	22	3.56	81.7	NC	81.7
Upgradient	MW-4	02/21/2023	0.000381 J	32.3	5.67	12.2	4.29	182	NC	182
Downgradient	MW-5	02/21/2023	0.322	48.8	7.49	16	1.17 J	260	NC	260
Downgradient	MW-6	02/22/2023	51.6	49.4	9.76	20.8	2.24	32.6	NC	32.6
Downgradient	MW-7	02/21/2023	2.1	37.6	5.01	10.4	1.91 J	296	NC	296
Downgradient	MW-8	02/21/2023	0.844	36.7	5.25	11.1	<1	349	NC	349

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.
6. NC = value not detected with alkalinity calculation

Table 6. First Semi-Annual Monitoring Event

Analytical Results Summary
Plant Gorgas CCR Landfill
02/20/2023 - 02/22/2023

General Chemistry and MNA Parameters			
Hydraulic Location	**Well**	**Sample Date**	**Sulfide mg/L**
Upgradient	MW-1	02/20/2023	0
Upgradient	MW-2	02/20/2023	0
Upgradient	MW-3	02/20/2023	0
Upgradient	MW-4	02/21/2023	0
Downgradient	MW-5	02/21/2023	0
Downgradient	MW-6	02/22/2023	0
Downgradient	MW-7	02/21/2023	0
Downgradient	MW-8	02/21/2023	0

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.
6. NC = value not detected with alkalinity calculation

Appendix A

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-1																												
	Date	04/26/2016	06/20/2016	08/08/2016	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/17/2017	03/22/2017	04/18/2017	05/30/2017	08/23/2017	02/13/2018	05/22/2018	06/12/2018	10/17/2018	11/19/2018	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021	07/12/2021	01/25/2022	07/05/2022	02/20/2023
Appendix III																														
Boron	mg/L	0.0231 J	0.0227 J	0.0278 J	0.0247 J	0.0307 J	0.0241 J	0.0202 J	0.0201 J	0.0224 J	<0.02	<0.02	0.0253 J	--	0.0224 J	0.0214 J	0.0216 J	0.0237 J	<0.0609	<0.03	0.0385 J	<0.03	<0.03	<0.03	<0.03	0.0307 J	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	147	152	150	142	139	133	144	131	141	149	140	152	--	166	203	171	154	167	157	157	172	149	147	148	151	149	159	158	159
Chloride	mg/L	1.94	2.09	2.18	2.22	2.34	2.34	2.5	2.68	2.4	2.4	2.6	2.7	--	2.3	2.3	--	1.7 J	2.28	2.31	2.42	2.07	2.01	2.1	2.05	2.16	2.19	2.09	2.07	2.05
Fluoride	mg/L	0.146 J	0.148 J	0.137 J	0.133 J	0.103 J	0.05 J	0.047 J	0.09 J	0.12	0.12	0.13	0.16	0.14	0.16	0.16	--	0.15	0.119	0.0924 J	0.0756 J	0.0982 J	0.101	0.0678 J	<0.06	0.082 J	0.125	0.101	0.11 J	0.221
pH_Field	SU	5.2	5.18	5.12	--	5.21	5.2	5.19	5.17	5.2	5.2	5.14	5.12	5.18	5.2	5.15	5.12	5.09	5.19	5.12	5.16	5	5.21	5.14	5.08	5.06	5.13	5.11	5.01	5.07
Sulfate	mg/L	1490	1420	1460	1450	1460	1330	1420	1350	1500	1300	1400	1500	--	2100	1500	--	1300	1560	1540	1680	1510	1530	1450	1370	1400	1560	1430	1600	1520
TDS	mg/L	2080	2060	2070	2040	2110	2000	2070	1930	2060	2140	2240	2160	--	2380	2400	2220	2360	2340	2330	3650	2380	2240	2240	2200	2230	2210	2150	2100	2280
Appendix IV																														
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	0.00137 J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<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	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000403	0.000363	0.000248	0.000282	0.00027
Barium	mg/L	0.00941 J	0.00951 J	0.00991 J	0.00949 J	0.0105	0.00931 J	0.00879 J	0.00929 J	0.00938 J	0.00964 J	0.00982 J	--	0.00937 J	0.0102	0.0104	0.00952 J	0.00915 J	0.00913 J	0.0109	0.0106	0.00995 J	0.00971 J	0.0101	0.0107	0.0107	0.00984	0.0098	0.0093	0.0102
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	--	<0.0006	<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	<0.000406	<0.000406
Cadmium	mg/L	0.00196	0.0021	0.00206	0.00182	0.00188	0.00175	0.00197	0.002	0.0019	0.00159	0.00214	--	0.0018	0.00201	0.00217	0.00228	0.00156	0.00238	0.00218	0.00225	0.00182	0.00184	0.0019	0.00237	0.00184	0.00185	0.00221	0.00211	0.00154
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	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.000382 J	0.000389 J	0.000354 J	0.000359 J	<0.000203
Cobalt	mg/L	0.0343	0.0413	0.0513	0.0471	0.0525	0.0527	0.0569	0.0768	0.0535	0.0442	0.0465	--	0.062	0.0443	0.0512	0.0751	0.0825	0.0485	0.0778	0.08	0.0495	0.0417	0.0532	0.0722	0.0657	0.0556	0.0671	0.0631	0.0587
Combined Radium 226 + 228	pCi/L	0.622	0.159 U	0.511 U	0.566 U	0.537 U	0.636	0.807	0.308 U	0.344 U	0.934	0.149 U	--	0.774	-0.091 U	1.18	--	0.862	0.509	1.47	0.204 U	0.521 U	0.309 U	0.219 U	-0.127 U	0.677 U	0.476 U	1.01 U	1.49	0.36 U
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	--	<0.001	<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	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0264 J	0.0246 J	0.0229 J	0.0236 J	0.0229 J	0.0227 J	0.0236 J	0.0228 J	0.0238 J	0.0242 J	0.0229 J	--	0.0233 J	0.0263 J	0.0251 J	0.025 J	0.0241	0.026 J	0.0268	0.0263	0.0292	0.0278	0.028	0.0259	0.0301	0.0266	0.0237	0.0237	0.0243
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	--	<0.002	<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	<6.8e-005	<0.000102	0.000862
Selenium	mg/L	0.00261 J	0.00242 J	0.00253 J	<0.002	0.00211 J	<0.002	<0.002	<0.002	0.0022 J	0.0027 J	0.00316 J	--	0.00211 J	0.00372 J	0.00409 J	<0.002	<0.002	0.00316 J	<0.002	<0.002	0.00272 J	0.00275 J	0.0025 J	0.00278 J	0.00241	0.00245	0.00216	0.00269	0.00228
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	--	<0.0002	<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	<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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-2																													
	Date	04/25/2016	05/05/2016	06/20/2016	08/08/2016	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/17/2017	03/22/2017	04/18/2017	05/31/2017	08/23/2017	02/13/2018	05/22/2018	06/12/2018	10/17/2018	11/19/2018	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021	07/12/2021	01/25/2022	07/05/2022	02/20/2023
Appendix III																															
Boron	mg/L	0.0241 J	--	0.0284 J	0.034 J	0.0316 J	0.0367 J	0.0331 J	0.035 J	0.0259 J	0.0243 J	0.0206 J	0.0234 J	0.0267 J	--	0.0251 J	0.0275 J	0.0321 J	0.0324 J	<0.0609	0.0371 J	0.0419 J	<0.03	<0.03	<0.03	0.0317 J	<0.03	<0.03	<0.03	<0.03	<0.03
Calcium	mg/L	123	--	168	180	180	184	171	179	188	155	156	151	155	--	172	179	200	221	168	190	194	172	152	163	172	178	159	193	168	165
Chloride	mg/L	1.9	--	3.43	3.31	3.23	3.21	3.35	3.34	3.58	3	2.6	4.4 J	4.4	--	3.2	3.7	--	3	2.98	4.26	4.04	2.48	2.43	4.05	4.03	1.72	2.36	2.28	2.62	1.7
Fluoride	mg/L	0.149 J	--	0.148 J	0.134 J	0.129 J	0.086 J	0.027 J	0.027 J	0.066 J	0.13	0.16	0.13	0.16	0.22	0.17	0.16	--	0.18	0.17	0.164	0.114	0.182	0.207	0.132	0.122	0.209	0.196	0.239	0.2	0.267
pH_Field	SU	5.94	--	5.96	5.88	--	5.91	5.84	5.82	5.87	6.01	6.02	5.85	5.89	6.21	6.04	5.95	5.9	6.03	6.07	5.96	5.98	5.95	6.21	5.84	5.95	6.1	6.16	6.22	6.15	6.24
Sulfate	mg/L	745	--	964	1100	1130	1140	1060	1100	1160	900	870	1100	920	--	1200	860	--	1000	948	1230	1170	803	786	843	907	864	763	847	844	767
TDS	mg/L	1260	--	1620	1740	1720	1800	1800	1740	1960	1510	1580	1730	1550	--	1500	1550	1740	1990	1480	1840	1830	1440	1440	1540	1650	1620	1390	1550	1250	1420
Appendix IV																															
Antimony	mg/L	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	<0.0008	0.000989 J	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	0.00111 J	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.000295	0.000364	0.000334	0.000278	0.000231
Barium	mg/L	0.0134	--	0.0165	0.0162	0.0139	0.0164	0.0138	0.0144	0.0135	0.0132	0.012	0.0126	--	0.0127	0.0131	0.0138	0.0137	0.0115	0.0109	0.0151	0.0146	0.0122	0.0125	0.0145	0.0147	0.0132	0.013	0.0134	0.013	0.0122
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	--	<0.0006	<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	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000311 J	<0.0002	<0.0002	0.000212 J	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	8.96e-005 J	8.27e-005 J	9.31e-005 J	<6.8e-005	8.1e-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	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.000203	0.000251 J	<0.000203	<0.000203	0.00033 J
Cobalt	mg/L	0.0487	--	0.0767	0.103	0.093	0.0964	0.0904	0.0857	0.0745	0.0328	0.0242	0.0441	--	0.0179	0.028	0.0366	0.0745	0.0225	0.0222	0.0674	0.073	0.0193	0.0116	0.0405	0.0589	0.0161	0.0155	0.0167	0.0192	0.0163
Combined Radium 226 + 228	pCi/L	--	-0.0718 U	0.295 U	0.231 U	0.65	0.845	0.994	0.537 U	-0.0159 U	0.279 U	0.32 U	0.178 U	--	0.804	0.0077 U	-0.315 U	--	0.654	0.579	0.493 U	0.046 U	-0.0245 U	0.212 U	0.0814 U	0.888 U	0.434 U	0.155 U	0.663 U	1.31	0.837 U
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	--	<0.001	<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	<6.8e-005	0.000135 J
Lithium	mg/L	0.0353 J	--	0.0583	0.0627	0.0651	0.0622	0.0293 J	0.0667	0.0636	0.0464 J	0.0446 J	0.0496 J	--	0.0615	0.0465 J	0.0472 J	0.0633	0.0584	0.0445	0.0677	0.0661	0.0534	0.0496	0.0615	0.0611	0.0625	0.0495	0.0502	0.0411	0.0418
Mercury	mg/L	<0.00025	--	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	--	<0.002	<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	<6.8e-005	<0.000102	<0.005075
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	--	<0.002	<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	<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	--	<0.0002	<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	<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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-3																												
	Date	04/25/2016	06/22/2016	08/09/2016	08/24/2016	10/04/2016	10/26/2016	11/21/2016	01/18/2017	03/22/2017	04/18/2017	05/31/2017	08/23/2017	02/13/2018	05/24/2018	06/12/2018	11/19/2018	04/10/2019	05/14/2019	10/08/2019	10/16/2019	02/03/2020	04/06/2020	07/13/2020	08/03/2020	02/22/2021	07/12/2021	01/25/2022	07/05/2022	02/20/2023
Appendix III																														
Boron	mg/L	0.028 J	0.0433 J	0.0429 J	0.0431 J	0.04 J	0.0375 J	0.0406 J	0.0548 J	0.0344 J	<0.02	0.0454 J	0.0425 J	--	0.0339 J	0.0371 J	0.0514 J	<0.03	<0.0609	0.0537 J	0.05 J	--	<0.03	0.0366 J	0.0424 J	<0.03	<0.03	<0.03	0.035 J	<0.03
Calcium	mg/L	224	266	260	274	243	254	263	431	318	296	306	298	--	297	318	387	348	254	371	346	--	177	264	285	312	252	285	376	210
Chloride	mg/L	1.32	1.46	1.35	1.47	1.59	1.27	1.38	1.34	2	2.2	1.5 J	1.8 J	--	1.6 J	1.4 J	<1.4	2.25	2.28	1.36	1.4	--	1.72	1.34	1.17	2.22	2.13	2.12	1.59	1.94
Fluoride	mg/L	0.243 J	0.269 J	0.363	0.346	0.266 J	0.266 J	0.244 J	0.385	0.41	0.29	0.37	0.55	0.27	0.6	0.53	0.31	0.273	0.281	0.225	0.106	--	0.314	0.13	0.0766 J	0.246	0.287	0.325	0.386	0.379
pH_Field	SU	5.56	5.57	5.67	5.63	5.69	5.56	5.42	5.11	4.52	5.84	4.56	4.77	5.67	5.19	4.79	3.77	5.54	5.71	4.98	4.51	--	5.91	5.16	5.06	5.59	5.86	5.9	5.34	6.01
Sulfate	mg/L	1890	2100	2050	2190	1950	1980	2060	2620	3200	2500	2800	2600	--	2700	2500	3000	2460	2460	2950	2820	--	1670	2130	2330	3040	2380	2550	3110	2110
TDS	mg/L	2720	3250	3050	3080	2900	2940	3090	4020	4180	4440	3970	4050	--	3680	3820	4710	3680	3580	4720	4210	--	2630	3650	3760	4670	3510	3950	4220	3230
Appendix IV																														
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	0.000978 J	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	0.00122 J	<0.001	<0.001	--	<0.001	<0.001	0.00103 J	0.0012 J	<0.001	<0.001	0.0048 J	0.00389 J	--	<0.001	0.0032 J	0.00426 J	0.000789	0.000376	0.000275	0.00426	0.000224
Barium	mg/L	0.00803 J	0.0101	0.00889 J	0.00962 J	0.00984 J	0.00878 J	0.00833 J	0.00966 J	0.00991 J	0.00976 J	0.00866 J	--	0.00821 J	0.00977 J	0.00997 J	0.0109	0.0101	0.00922 J	0.0154	0.0128	--	0.00931 J	0.0142	0.0166	0.00981	0.00857	0.00821	0.0151	0.00822
Beryllium	mg/L	0.00122 J	0.00144 J	0.00331	0.00308	0.00129 J	0.0071	0.00689	0.0169	0.00686	<0.0006	0.00547	--	<0.0006	0.00164 J	0.00306	0.0185	<0.0006	<0.0006	0.0084	0.0103	--	<0.0006	0.0021 J	0.00405	<0.000406	<0.000406	<0.000406	0.00237	<0.000406
Cadmium	mg/L	0.0121	0.00163	0.00122	<0.0002	0.000689 J	0.00136	0.00171	0.003	0.00473	0.00117	0.00296	--	0.00232	0.00459	0.00351	0.00309	0.00337	0.0013	0.00598	0.00448	--	0.000645 J	0.0089	0.00652	0.00536	0.000937	0.00178	0.00848	0.00144
Chromium	mg/L	0.00373 J	0.00606 J	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00945 J	0.0105	<0.002	--	<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	0.000307 J	0.000509 J	0.000235 J	0.000297 J
Cobalt	mg/L	0.232	0.332	0.311	0.271	0.148	0.236	0.241	0.347	0.271	0.00324 J	0.225	--	0.00661 J	0.158	0.291	0.386	0.0144	0.00536	1.07	0.848	--	<0.002	0.47	0.64	0.0515	0.00567	0.00535	0.263	0.00375
Combined Radium 226 + 228	pCi/L	0.484 U	0.2 U	0.378 U	0.131 U	0.514 U	0.755	0.7	0.606	0.927	0.334 U	0.8	--	0.649	0.448 U	0.234 U	0.521	--	0.176 U	0.833 U	0.0279 U	0.0246 U	0.569 U	0.53	0.765 U	0.472 U	0.114 U	0.418 U	1.33	0.234 U
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	--	<0.001	<0.001	<0.001	0.00692	<0.001	<0.001	<0.001	0.00108 J	--	<0.001	<0.001	0.002 J	8.8e-005 J	8.42e-005 J	<6.8e-005	0.000185 J	<6.8e-005
Lithium	mg/L	0.0964	0.156	0.122	0.138	0.0966	0.134	0.167	0.237	0.203	0.0764	0.218	--	0.0964	0.145	0.194	0.323	0.0905	0.0828	0.419	0.337	--	0.0689	0.256	0.27	0.126	0.0808	0.077	0.217	0.065
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	--	<0.002	<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	<6.8e-005	<0.000102	<0.000102
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.0141	0.0158	0.00632 J	--	0.0209	0.00918 J	0.00836 J	0.00439 J	0.0113	0.0119	0.00256 J	0.00286 J	--	0.01	0.0134	0.0146	0.0181	0.0133	0.0154	0.0238	0.0125
Thallium	mg/L	0.000205 J	<0.0002	<0.0002	<0.0002	<0.0002	0.000209 J	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	0.000226 J	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-4																										
	Date	04/25/2016	06/20/2016	08/09/2016	08/24/2016	10/03/2016	10/26/2016	11/21/2016	01/18/2017	03/22/2017	04/18/2017	05/31/2017	08/23/2017	02/13/2018	05/23/2018	06/12/2018	11/19/2018	04/10/2019	05/14/2019	10/10/2019	10/16/2019	02/03/2020	04/06/2020	07/14/2020	02/22/2021	07/12/2021	01/25/2022	07/05/2022	02/21/2023
Appendix III																												
Boron	mg/L	0.0414 J	0.0434 J	0.0453 J	0.0451 J	0.0511 J	0.0507 J	0.0458 J	0.0445 J	0.0432 J	0.0409 J	0.0392 J	0.042 J	--	0.0433 J	0.0478 J	0.0526 J	0.0438 J	<0.0609	0.0487 J	0.0505 J	--	0.0428 J	0.0441 J	0.0397 J	0.0411 J	0.0408 J	0.0417 J	0.0416 J
Calcium	mg/L	261	295	318	319	293	311	320	417	292	302	284	297	--	296	355	289	356	254	302	356	--	222	259	271	242	259	271	239
Chloride	mg/L	1.53	1.85	1.95	2.07	2.02	2.07	2.39	1.9	1.5 J	1.6 J	2.1	2.3	--	2	1.7 J	<1.4	1.88	1.82	1.93	1.92	--	1.5	1.61	1.52	1.56	1.54	1.63	1.58
Fluoride	mg/L	0.372	0.361	0.326	0.329	0.287 J	0.194 J	0.192 J	0.223 J	0.32	0.32	0.31	0.38	0.38	0.38	0.39	0.36	0.384	0.335	0.304	0.302	--	0.368	0.33	0.357	0.35	0.364	0.362	0.415
pH_Field	SU	6.22	6.21	6.11	6.11	6.13	6.12	6.09	6.09	6.15	6.19	6.13	6.12	6.22	6.21	6.16	6.16	6.14	6.23	6.15	6.19	--	6.35	6.2	6.19	6.06	6.3	6.12	6.35
Sulfate	mg/L	2260	2500	2750	2770	3060	2650	2720	2650	2700	2400	2700	2700	--	2400	2600	2400	2090	2240	2690	3050	--	1810	1970	2040	1930	1930	2380	1930
TDS	mg/L	3300	3870	4140	4190	4190	4400	4230	4120	3980	3880	4210	3990	--	3740	4080	3920	3280	3130	4000	4060	--	2820	3310	3190	3000	3180	3240	3160
Appendix IV																												
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0006	<0.0008	0.00097 J	<0.0008	<0.0008	<0.0008	--	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<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	--	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	0.000125 J	0.000116 J	6.97e-005 J	9.56e-005 J	<8.1e-005
Barium	mg/L	0.0114	0.0103	0.0119	0.0118	0.0119	0.0104	0.0106	0.0101	0.0103	0.0107	0.0104	--	0.0111	0.0107	0.0108	0.0107	0.0107	0.00949 J	0.0116	0.0125	--	0.0115	0.0122	0.0111	0.0108	0.00908	0.0115	0.0116
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	--	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	--	<0.0003	<0.0003	8.96e-005 J	8.19e-005 J	<6.8e-005	6.94e-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	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<0.000203	0.000302 J	0.000216 J	<0.000203	<0.000203
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	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Combined Radium 226 + 228	pCi/L	0.434 U	0.287 U	0.516 U	0.266 U	0.59 U	0.164 U	0.296 U	0.0267 U	0.132 U	-0.0439 U	0.3 U	--	0.69	0.186 U	0.153 U	0.794	--	0.352 U	1.02 U	0.356 U	0.254 U	0.459 U	0.169 U	0 U	0.301 U	0.884 U	1.1	0.3 U
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	--	<0.001	<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	<6.8e-005	<6.8e-005
Lithium	mg/L	0.0528	0.0554	0.0452 J	0.0488 J	0.0476 J	0.049 J	0.0477 J	0.045 J	0.0493 J	0.0494 J	0.0501	--	0.0446 J	0.0513	0.0511	0.0467	0.0504	0.0485	0.054	0.052	--	0.0519	0.0543	0.0558	0.0533	0.0434	0.0484	0.0431
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	--	<0.002	<0.002	0.000131 J	0.000138 J	0.000114 J	<0.000102	0.00015 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	--	0.00403 J	<0.002	<0.002	0.00436 J	<0.002	0.00201 J	<0.002	<0.002	--	0.00284 J	<0.002	0.00222	0.00155	0.00224	0.000967 J	0.00248
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	--	<0.0002	<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	<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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-5																			
	Date	04/25/2016	06/21/2016	10/12/2017	10/13/2017	10/14/2017	10/15/2017	10/16/2017	10/17/2017	11/16/2017	02/14/2018	05/23/2018	11/20/2018	05/14/2019	10/10/2019	04/07/2020	07/14/2020	02/23/2021	07/21/2021	01/31/2022	07/06/2022	02/21/2023
Appendix III																					
Boron	mg/L	0.0301 J	0.0304 J	0.0285 J	0.0287 J	0.0305 J	0.0319 J	0.0304 J	0.036 J	0.0377 J	--	0.0301 J	0.0357 J	<0.0609	0.0323 J	0.0399 J	0.033 J	0.0369 J	0.0319 J	0.0305 J	0.0315 J	0.0315 J
Calcium	mg/L	399	295	394	389	391	332	380	377	368	--	405	414	441	386	432	395	394	384	398	379	367
Chloride	mg/L	5.44	6.32	7.9	8	7.4	7.2	8.1	7.9	8.1	--	7	7.4	6.24	7.88	4.83	6.84	6.19	6.73	6.87	7.51	5.25
Fluoride	mg/L	0.307	0.337	0.35	0.36	0.37	0.37	0.36	0.35	0.37	0.33	0.29	0.32	0.22	0.338	0.225	0.263	0.287	0.331	0.291	0.306	0.319
pH_Field	SU	--	--	--	--	--	--	--	--	--	6.39	--	--	6.34	6.43	6.43	6.48	6.47	6.4	6.52	6.51	6.5
Sulfate	mg/L	2390	2500	2300	2300	2300	2300	2300	2200	2200	--	2400	2500	2380	2460	2050	2080	2210	2240	2310	2320	2210
TDS	mg/L	3660	3920	4000	3960	3910	3890	3980	3940	3930	--	3660	3780	3520	3830	3270	3710	3740	3570	3560	3390	3310
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.00138 J	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	--	<0.001	<0.001	<0.001	0.00153 J	<0.001	0.00163 J	<0.001	0.000309	0.000461	0.000193 J	0.000171 J	0.000306
Barium	mg/L	0.016	0.0112	0.0122	0.0115	0.0099 J	0.0103	0.0101	0.00968 J	--	0.0114	0.0138	0.0105	0.0111	0.0105	0.0137	0.0124	0.0116	0.0116	0.0104	0.012	0.0107
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	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<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	<0.002	<0.002	<0.002	<0.002	<0.000203	<0.000203	<0.000203	0.000319 J	<0.000203
Cobalt	mg/L	0.00287 J	0.00228 J	<0.002	<0.002	<0.002	0.00203 J	<0.002	<0.002	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00102	0.00127	0.0011	0.000538	0.000976
Combined Radium 226 + 228	pCi/L	0.611	0.304 U	0.627 U	0.391 U	1.2 U	0.806 U	0.564 U	0.178 U	--	0.955	0.543	0.687	0.663	0.811 U	0.48 U	0.521	0.71 U	0.79 U	0.0523 U	0.747 U	0.275 U
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	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	8e-005 J	<6.8e-005
Lithium	mg/L	0.0977	0.0972	0.093	0.0935	0.0931	0.0968	0.0963	0.0949	--	0.0989	0.103	0.102	0.116	0.0981	0.133	0.11	0.133	0.113	0.0893	0.0907	0.104
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	<0.002	<0.002	<0.002	<0.002	0.0014	0.00126	0.00127	0.00115	0.000945
Selenium	mg/L	<0.002	<0.002	<0.002	<0.002	<0.002	0.00254 J	<0.002	0.00288 J	--	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.00233	0.00178	0.00237	0.00239	0.00172
Thallium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	0.000375 J	<0.0002	--	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	8.95e-005 J	<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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-6																			
	Date	04/27/2016	06/21/2016	10/12/2017	10/13/2017	10/14/2017	10/15/2017	10/16/2017	10/17/2017	11/16/2017	02/14/2018	05/23/2018	11/20/2018	05/15/2019	10/10/2019	04/08/2020	07/14/2020	02/23/2021	07/20/2021	01/31/2022	07/06/2022	02/22/2023
Appendix III																					
Boron	mg/L	0.075 J	0.0729 J	0.0806 J	0.0803 J	0.0828 J	0.0852 J	0.0858 J	0.0846 J	0.0772 J	--	0.0757 J	0.0915 J	0.0616 J	0.0919 J	0.0499 J	0.0838 J	0.0866 J	0.0608 J	0.0623 J	0.0638 J	0.0356 J
Calcium	mg/L	411	318	421	396	400	378	402	373	367	--	425	449	345	461	242	406	428	351	385	403	250
Chloride	mg/L	2.19	2.56	3.4	3	2.8	1.9 J	1.8 J	3.1	3.5	--	2.6	2.7	4.45	3.61	4.63	3.25	3.47	4.05	4.7	3.36	4.37
Fluoride	mg/L	0.131 J	0.153 J	0.15	0.15	0.14	0.14	0.14	0.14	0.14	0.13	0.13	0.14	0.133	0.124	<0.06	0.115	0.139	0.131	0.121	0.147	0.173
pH_Field	SU	--	--	--	--	--	--	--	--	--	6.17	--	--	5.72	6.16	4.98	6.12	6.13	5.99	6.1	6.14	4.98
Sulfate	mg/L	2090	2000	2000	2000	1900	1900	1900	1900	1800	--	2000	2200	2110	2330	1900	1970	2010	1930	2070	2100	1870
TDS	mg/L	3290	3250	3220	3250	3260	3260	3360	3420	3280	--	3340	3330	3130	3260	2940	3270	3230	2980	3070	3110	2790
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	0.005	0.00473 J	0.0051	0.00487 J	0.00476 J	0.00475 J	0.00482 J	0.0048 J	--	0.00493 J	0.0058	0.00542	0.00383 J	0.00473 J	0.00232 J	0.0048 J	0.00494	0.00475	0.00375	0.00481	0.00337
Barium	mg/L	0.012	0.0133	0.0134	0.0124	0.0129	0.0136	0.0131	0.0126	--	0.0142	0.0145	0.0127	0.0121	0.0152	0.0128	0.0154	0.0143	0.0137	0.0125	0.0149	0.0136
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	0.000677 J	<0.0006	0.000788 J	<0.0006	<0.000406	0.000453 J	0.000567 J	<0.000406	0.00123
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	0.000858 J	<0.0003	0.00204	<0.0003	<6.8e-005	0.000626	0.00078	<6.8e-005	0.00192
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	<0.002	<0.002	<0.002	<0.002	<0.000203	<0.000203	0.000436 J	0.000245 J	0.000301 J
Cobalt	mg/L	0.0287	0.0269	0.0279	0.0271	0.0296	0.0303	0.0274	0.0274	--	0.0305	0.0409	0.0327	0.265	0.0425	0.479	0.0916	0.0771	0.216	0.184	0.0674	0.487
Combined Radium 226 + 228	pCi/L	0.956	0.748	0.564 U	1.36 U	1.59 U	1.22 U	1.57 U	0.631 U	--	0.969	0.918	1.15	1.56	1.71	0.179 U	0.578	1.15 U	1.32	0.374 U	1.56	3.75
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	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	0.000232	0.000115 J
Lithium	mg/L	0.253	0.253	0.249	0.249	0.244	0.259	0.259	0.249	--	0.242	0.266	0.245	0.152	0.251	0.0489	0.223	0.253	0.18	0.139	0.196	0.0329
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	<0.002	<0.002	<0.002	<0.002	0.000285	8.27e-005 J	0.000151 J	0.000288	<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	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<0.000508	0.00162
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	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	9.93e-005 J	8.43e-005 J	0.000138 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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-7																			
	Date	04/27/2016	06/21/2016	10/12/2017	10/13/2017	10/14/2017	10/15/2017	10/16/2017	10/17/2017	11/16/2017	02/14/2018	05/23/2018	11/20/2018	05/15/2019	10/08/2019	04/08/2020	07/14/2020	02/23/2021	07/20/2021	01/31/2022	07/06/2022	02/21/2023
Appendix III																						
Boron	mg/L	0.253	0.0768 J	0.0685 J	0.0674 J	0.0756 J	0.0719 J	0.0726 J	0.0716 J	0.0644 J	--	0.0715 J	0.0772 J	0.0678 J	0.073 J	0.077 J	0.0865 J	0.0803 J	0.0721 J	0.0697 J	0.0705 J	0.0645 J
Calcium	mg/L	198	327	317	302	283	294	284	294	299	--	321	306	302	294	280	261	292	254	270	295	299
Chloride	mg/L	1.71	2.04	31	32	33	34	34	34	35	--	28	20	15.9	16.8	10.6	9.68	7.85	6.35	6.4	6.25	6.12
Fluoride	mg/L	0.2 J	0.163 J	0.17	0.19	0.2	0.2	0.2	0.19	0.18	0.18	0.18	0.19	0.169	0.183	0.153	0.193	0.2	0.286	0.173	0.198	0.216
pH_Field	SU	--	--	--	--	--	--	--	--	--	6.67	--	--	6.61	6.52	6.64	6.52	6.7	6.58	6.48	6.46	6.72
Sulfate	mg/L	1050	1410	1400	1400	1300	1300	1300	1300	1300	--	1900	1100	1510	1570	1270	1330	1320	1170	1370	1330	1450
TDS	mg/L	1640	2460	2460	2420	2320	1150	2320	2360	2460	--	2390	2090	2310	2340	2230	2210	2320	2110	2140	2110	2220
Appendix IV																						
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	0.00165 J	0.00188 J	0.00181 J	0.00127 J	0.00144 J	0.00139 J	0.00138 J	--	0.00131 J	0.00155 J	0.00133 J	0.00138 J	0.00145 J	0.00136 J	0.00147 J	0.00141	0.00164	0.00156	0.00158	0.00153
Barium	mg/L	0.0107	0.0129	0.014	0.0147	0.0123	0.0132	0.0122	0.0121	--	0.0119	0.0135	0.0116	0.0114	0.0145	0.0127	0.0148	0.014	0.0142	0.0126	0.0142	0.0141
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	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<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	<0.002	<0.002	<0.002	<0.002	<0.000203	<0.000203	0.000321 J	0.000273 J	<0.000203
Cobalt	mg/L	<0.002	<0.002	0.00269 J	0.00341 J	0.00451 J	0.00371 J	0.00371 J	0.0035 J	--	<0.002	<0.002	0.00306 J	0.00234 J	0.00408 J	0.00394 J	0.00653	0.00294	0.00561	0.00546	0.00571	0.0043
Combined Radium 226 + 228	pCi/L	0.374 U	0.151 U	0.182 U	0.517 U	0.43 U	0.45 U	0.55 U	0.474 U	--	0.736	0.0192 U	0.494	0.61	0.345 U	0.237 U	0.434	0.696 U	0.356 U	0.473 U	0.716 U	0.789 U
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	<0.001	<0.001	<0.001	<0.001	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005	<6.8e-005
Lithium	mg/L	0.163	0.171	0.134	0.127	0.112	0.129	0.122	0.122	--	0.131	0.129	0.12	0.127	0.131	0.117	0.103	0.131	0.096	0.0907	0.0806	0.0932
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	<0.002	<0.002	<0.002	<0.002	0.00107	0.00086	0.000929	0.000979	0.000885
Selenium	mg/L	0.00445 J	<0.002	<0.002	<0.002	<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	0.00072 J	<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	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<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 Quantitation Limit (PQL).

Appendix A. Historical Analytical Data Summary
Plant Gorgas CCR Landfill

Analyte	Well	MW-8																			
	Date	04/27/2016	06/21/2016	10/12/2017	10/13/2017	10/14/2017	10/15/2017	10/16/2017	10/17/2017	11/16/2017	02/14/2018	05/23/2018	11/20/2018	05/15/2019	10/09/2019	04/08/2020	07/15/2020	02/23/2021	07/20/2021	02/01/2022	07/06/2022	02/21/2023
Appendix III																					
Boron	mg/L	0.0662 J	0.0681 J	0.0687 J	0.0831 J	0.0702 J	0.0702 J	0.0707 J	0.0695 J	0.0675 J	--	0.0693 J	0.0771 J	0.0689 J	0.0723 J	0.0683 J	0.0723 J	0.0731 J	0.0656 J	0.0639 J	0.0643 J	0.0609 J
Calcium	mg/L	282	291	300	298	299	307	299	294	308	--	344	327	305	329	281	280	306	281	291	299	317
Chloride	mg/L	2.34	2.29	150	130	140	130	140	140	130	--	75	45	52	39.2	24.9	23.8	17.9	14.3	8.56	6.5	4.86
Fluoride	mg/L	0.212 J	0.211 J	0.22	0.23	0.22	0.22	0.22	0.21	0.22	0.21	0.21	0.21	0.192	0.189	0.192	0.196	0.208	0.262	0.177	0.173	0.212
pH_Field	SU	--	--	--	--	--	--	--	--	--	6.55	--	--	6.6	6.67	6.7	6.71	6.73	6.64	6.77	6.72	6.75
Sulfate	mg/L	1550	1470	1400	1600	1400	1400	1400	1400	1400	--	2100	1400	1640	1550	1380	1410	1420	1500	1500	1460	1510
TDS	mg/L	2480	2360	2530	2740	2630	2530	2740	2650	2650	--	2750	2520	2540	2590	2450	2460	2550	2420	2420	2320	2370
Appendix IV																					
Antimony	mg/L	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	--	<0.0006	<0.0006	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.000507	<0.000508	<0.000508	<0.000508	<0.000508
Arsenic	mg/L	<0.001	0.00101 J	0.00197 J	0.00159 J	0.00126 J	0.00106 J	0.00106 J	0.00103 J	--	0.00185 J	0.00157 J	0.00173 J	0.00136 J	0.00142 J	0.00102 J	0.00212 J	0.00117	0.00111	0.00131	0.000356	0.000567
Barium	mg/L	0.0108	0.0116	0.0141	0.0148	0.0134	0.0139	0.0129	0.0126	--	0.0126	0.0137	0.0123	0.0122	0.0137	0.0137	0.0143	0.014	0.0141	0.0142	0.0132	0.0148
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	<0.0006	<0.0006	<0.0006	<0.0006	<0.000406	<0.000406	<0.000406	<0.000406	<0.000406
Cadmium	mg/L	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	--	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<6.8e-005	<6.8e-005	<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	<0.002	<0.002	<0.002	<0.002	<0.000203	<0.000203	0.000253 J	0.000368 J	<0.000203
Cobalt	mg/L	0.00436 J	0.00484 J	0.005 J	0.0052 J	0.00513 J	0.00518 J	0.00453 J	0.00463 J	--	0.00441 J	0.00466 J	0.00551	0.00643	0.00864	0.00762	0.00821	0.00796	0.00714	0.00684	0.00673	0.00585
Combined Radium 226 + 228	pCi/L	-0.207 U	0.529	0.267 U	0.873 U	1.6 U	0.327 U	0.524 U	0.0455 U	--	0.633	0.377 U	0.28 U	0.697	0.416 U	1.38 U	0.398 U	0.685 U	0.42 U	0.643 U	0.415 U	2.19
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	<0.001	<0.001	<0.001	<0.001	<6.8e-005	9.44e-005 J	8.59e-005 J	<6.8e-005	<6.8e-005
Lithium	mg/L	0.171	0.181	0.182	0.189	0.177	0.191	0.189	0.184	--	0.183	0.194	0.181	0.16	0.163	0.149	0.152	0.166	0.151	0.124	0.124	0.119
Mercury	mg/L	<0.00025	<0.00025	<0.00025	<0.00025	<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	<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	<0.002	<0.002	<0.002	<0.002	0.0129	0.000329	0.000309	0.000336	0.000338
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	<0.002	<0.002	<0.002	<0.002	<0.000507	<0.000508	<0.000508	<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	<0.0002	<0.0002	<0.0002	<0.0002	<6.8e-005	<6.8e-005	<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 Quantitation Limit (PQL).

Appendix B

Appendix B. Historical Groundwater Elevations Summary
Plant Gorgas CCR Landfill
10/12/2015 - 02/20/2023

Well	Hydraulic Location	Top of Casing Elevation (ft. AMSL)	Groundwater Elevation (ft.AMSL)														
			10/12/15	04/25/16	06/20/16	08/08/16	08/24/16	10/03/16	10/26/16	11/21/16	01/17/17	03/20/17	04/10/17	04/17/17	05/30/17	08/23/17	10/12/17	10/13/17
MW-1	Upgradient	502.71	410.95	411.22	410.7	410.49	410.43	410.31	410.19	410.1	410.07	410.67	410.89	410.94	410.8	411.06	410.7	410.72
MW-2	Upgradient	502.47	417.16	417.36	416.76	416.6	416.42	416.21	416.08	415.98	416.62	417.24	417.66	417.34	416.94	417.02	416.5	416.54
MW-3	Upgradient	526.15	415.81	416.41	415.45	415	415.08	414.82	414.64	414.43	415.27	416.07	418.23	417.21	415.63	415.73	415.1	415.14
MW-4	Upgradient	518.30	401.88	402.31	401.79	400.61	400.57	400.09	399.83	399.53	400.51	402.02	402.5	402.33	401.68	401.77	400.79	400.76
MW-5	Downgradient	474.90	348.34	348.47	348.37	348.39	NM	348.39	NM	348.38	348.34	348.4	348.53	NM	348.42	348.42	348.38	348.4
MW-6	Downgradient	415.31	308.19	312.84	308.08	305.87	NM	304.61	NM	304.24	304.6	306.45	307.79	NM	306.65	310.02	306.04	306.03
MW-7	Downgradient	394.69	333.98	336.39	334.07	333.91	NM	333.86	NM	333.71	333.81	334.1	336.18	NM	334.24	335.75	334.36	334.53
MW-8	Downgradient	415.83	353.1	351.49	351.75	351.95	NM	352.15	NM	352.16	352.56	352.92	353.12	NM	353.12	353.29	353.39	353.32
MW-9	Piezometer	490.15	376.17	376.22	376.2	376.14	NM	376.07	NM	NM	376.13	376.08	376.2	NM	376.05	---	---	---
MW-9R	Piezometer	503.27	---	---	---	---	---	---	---	---	---	---	---	---	---	372.94	NM	NM

Notes:

(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) ft. AMSL - Feet Above Mean Sea Level
(3) NM - Not Measured

(4) Ground surface and top of casing elevations for all on-site compliance wells were resurvyed by a licensed Professional Land Surveyor on April 13, 2023

Southern Company

Appendix B. Historical Groundwater Elevations Summary
Plant Gorgas CCR Landfill
10/12/2015 - 02/20/2023

Well	Hydraulic Location	Top of Casing Elevation (ft. AMSL)	Groundwater Elevation (ft.AMSL)														
			10/14/17	10/15/17	10/16/17	10/17/17	10/23/17	11/15/17	02/12/18	02/13/18	04/09/18	05/21/18	06/11/18	10/17/18	10/29/18	11/19/18	03/13/19	04/10/19
MW-1	Upgradient	502.71	410.68	410.73	410.68	410.65	410.69	410.66	410.89	410.89	411.35	411.47	411.28	410.65	410.62	410.8	412.11	411.95
MW-2	Upgradient	502.47	416.49	416.53	416.5	416.51	416.62	416.74	419.29	419.29	417.32	417.33	417.03	416.39	416.3	417.67	417.7	421.15
MW-3	Upgradient	526.15	415.15	415.17	415.13	415.12	415.17	415.41	418.49	418.49	416.25	416.28	415.77	414.92	414.85	416.31	418.31	416.4
MW-4	Upgradient	518.30	400.67	400.67	400.59	400.62	400.54	400.6	402.67	402.67	402.22	402.24	402.01	400.3	400.18	402.08	402.68	402.86
MW-5	Downgradient	474.90	348.36	348.37	348.34	348.37	NM	348.43	348.61	NM	348.5	348.49	NM	NM	348.42	348.55	348.74	NM
MW-6	Downgradient	415.31	305.99	305.98	305.95	305.91	NM	305.75	306.47	NM	311.9	314.14	304.84	306.89	323.91	316.49	NM	NM
MW-7	Downgradient	394.69	334.45	334.45	334.42	334.41	NM	334.14	336.82	NM	335.68	336.6	NM	NM	334.01	337.61	339.54	NM
MW-8	Downgradient	415.83	353.31	353.4	353.34	353.31	NM	353.3	353.44	NM	353.5	353.55	NM	NM	353.08	353.37	353.47	NM
MW-9	Piezometer	490.15	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
MW-9R	Piezometer	503.27	NM	NM	NM	NM	NM	372.96	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) ft. AMSL - Feet Above Mean Sea Level
(3) NM - Not Measured

(4) Ground surface and top of casing elevations for all on-site compliance wells were resurvyed by a licensed Professional Land Surveyor on April 13, 2023

Southern Company

Appendix B. Historical Groundwater Elevations Summary
Plant Gorgas CCR Landfill
10/12/2015 - 02/20/2023

Well	Hydraulic Location	Top of Casing Elevation (ft. AMSL)	Groundwater Elevation (ft.AMSL)										
			05/13/19	10/07/19	10/14/19	04/06/20	07/13/20	08/03/20	02/22/21	07/12/21	01/24/22	07/05/22	02/20/23
MW-1	Upgradient	502.71	411.77	410.79	410.72	412.16	411.22	412.19	411.59	411.54	411.49	411.39	412.18
MW-2	Upgradient	502.47	417.64	416.63	416.62	417.81	416.93	417.1	418.5	417.75	418.4	417.74	419.04
MW-3	Upgradient	526.15	415.17	415.14	417.64	417.41	415.34	419.94	421.54	415.49	418.99	416.02	419.16
MW-4	Upgradient	518.30	402.43	400.33	400.33	402.59	401.42	402.82	402.3	401.37	402.52	401.99	402.34
MW-5	Downgradient	474.90	348.66	348.46	NM	348.74	348.59	NM	348.81	348.65	348.76	348.61	349.08
MW-6	Downgradient	415.31	NM	304.21	NM	319.32	309.56	311.83	314.66	NM	312.53	310.54	320.13
MW-7	Downgradient	394.69	338.44	334.13	NM	338.34	335.86	NM	338.01	336.47	337.16	334.16	337.65
MW-8	Downgradient	415.83	353.32	352.22	NM	353.52	353.04	NM	352.81	352.61	352.56	352.29	352.44
MW-9	Piezometer	490.15	---	---	---	---	---	---	---	---	---	---	---
MW-9R	Piezometer	503.27	373.11	372.99	NM	373.15	373.04	NM	373.15	373.13	373.13	373.08	373.29

Notes:

(1) Groundwater elevations measured in vertical feet relative to the North American Vertical Datum (NAVD) 1988.
(2) ft. AMSL - Feet Above Mean Sea Level
(3) NM - Not Measured

(4) Ground surface and top of casing elevations for all on-site compliance wells were resurvyed by a licensed Professional Land Surveyor on April 13, 2023

Appendix C

Water Level Record/Well Inspection
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: awgoggin
PIN: 032284
Reason:

Submit

Date	02/20/2023	Weather	Cloudy 65
Location	Gorgas Pooled Upgradient		
Collector	TJ Daugherty		

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-1	1122	90.53	✔	✔	✔	✔	✔	
MW-2	1313	83.43	✔	✔	✔	✔	✔	
MW-3	1413	106.99	✔	✔	✔	✔	✔	
MW-4	1600	115.96	✔	✔	✔	✔	✔	
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Water Level Record/Well Inspection

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Y

User Name: Dfgentry
PIN: 123654
Reason:

Submit

Date: 02/20/2023
Location: Gorgas Landfill
Collector: Dallas Gentry

Weather: Overcast 65

			In Good Condition					
Well	Time	Water Level (ft)	Locks	Bollards	Pad	Protective Casing	Name Plate	Comment
MW-5	1607	125.82	✔	✔	✔	✔	✔	collected by TJD
MW-6	1611	95.18	✔	✔	✔	✔	✔	
MW-7	1616	57.04	✔	✔	✔	✔	✔	
MW-8	1619	63.39	✔	✔	✔	✔	✔	
MW-9R	1627	129.98	✔	✔	✔	✔	✔	
MW-10	1601	86.39	✔	✔	✔	✔	✔	
MW-11	1542	101.93	✔	✔	✔	✔	✔	
MW-12	1550	154.52	✔	✔	✔	✔	✔	
MW-12V	1555	156.53	✔	✔	✔	✔	✔	
MW-13	1039	93.65	✔	✔	✔	✔	✔	
MW-14	1139	89.01	✔	✔	✔	✔	✔	
MW-15	1249	66.47	✔	✔	✔	✔	✔	
MW-16	1358	90.02	✔	✔	✔	✔	✔	
MW-17R	1520	125.58	✔	✔	✔	✔	✔	
MW-18	1525	110.93	✔	✔	✔	✔	✔	
MW-19	1529	78.24	✔	✔	✔	✔	✔	
MW-20	1535	18.86	✔	✔	✔	✔	✔	
PZ-21	1605	84.60	✔	✔	✔	✔	✔	

Plant Gorgas CCB Landfills
Field Parameter Summary

WELL ID	PARAMETER	DESCRIPTION	TIME OF READING	VALUE	UNIT
APCO-GS-CCB-MW-1	COND	Conductivity	2/20/23 11:27	2307.56	uS/cm
APCO-GS-CCB-MW-1	DO	DO	2/20/23 11:27	1.16	mg/L
APCO-GS-CCB-MW-1	DTW	Depth to Water Detail	2/20/23 11:27	92.88	ft
APCO-GS-CCB-MW-1	ORP	Oxidation Reduction Potention	2/20/23 11:27	317.83	mv
APCO-GS-CCB-MW-1	PH	pH	2/20/23 11:27	5.04	SU
APCO-GS-CCB-MW-1	TEMP	Temperature	2/20/23 11:27	19.45	C
APCO-GS-CCB-MW-1	TURB	Turbidity	2/20/23 11:27	0.66	NTU
APCO-GS-CCB-MW-1	COND	Conductivity	2/20/23 11:32	2301.7	uS/cm
APCO-GS-CCB-MW-1	DO	DO	2/20/23 11:32	1.19	mg/L
APCO-GS-CCB-MW-1	DTW	Depth to Water Detail	2/20/23 11:32	92.9	ft
APCO-GS-CCB-MW-1	ORP	Oxidation Reduction Potention	2/20/23 11:32	338.68	mv
APCO-GS-CCB-MW-1	PH	pH	2/20/23 11:32	5.05	SU
APCO-GS-CCB-MW-1	TEMP	Temperature	2/20/23 11:32	19.57	C
APCO-GS-CCB-MW-1	TURB	Turbidity	2/20/23 11:32	0.59	NTU
APCO-GS-CCB-MW-1	COND	Conductivity	2/20/23 11:37	2295.88	uS/cm
APCO-GS-CCB-MW-1	DO	DO	2/20/23 11:37	1.02	mg/L
APCO-GS-CCB-MW-1	DTW	Depth to Water Detail	2/20/23 11:37	92.92	ft
APCO-GS-CCB-MW-1	ORP	Oxidation Reduction Potention	2/20/23 11:37	348.93	mv
APCO-GS-CCB-MW-1	PH	pH	2/20/23 11:37	5.07	SU
APCO-GS-CCB-MW-1	TEMP	Temperature	2/20/23 11:37	19.63	C
APCO-GS-CCB-MW-1	TURB	Turbidity	2/20/23 11:37	0.69	NTU
APCO-GS-CCB-MW-1	COND	Conductivity	2/20/23 11:42	2343.61	uS/cm
APCO-GS-CCB-MW-1	DO	DO	2/20/23 11:42	0.97	mg/L
APCO-GS-CCB-MW-1	DTW	Depth to Water Detail	2/20/23 11:42	92.94	ft
APCO-GS-CCB-MW-1	ORP	Oxidation Reduction Potention	2/20/23 11:42	355.62	mv
APCO-GS-CCB-MW-1	PH	pH	2/20/23 11:42	5.08	SU
APCO-GS-CCB-MW-1	TEMP	Temperature	2/20/23 11:42	19.63	C
APCO-GS-CCB-MW-1	TURB	Turbidity	2/20/23 11:42	0.5	NTU
APCO-GS-CCB-MW-1	COND	Conductivity	2/20/23 11:47	2297.01	uS/cm
APCO-GS-CCB-MW-1	DO	DO	2/20/23 11:47	0.95	mg/L
APCO-GS-CCB-MW-1	DTW	Depth to Water Detail	2/20/23 11:47	92.94	ft
APCO-GS-CCB-MW-1	ORP	Oxidation Reduction Potention	2/20/23 11:47	361.14	mv
APCO-GS-CCB-MW-1	PH	pH	2/20/23 11:47	5.07	SU
APCO-GS-CCB-MW-1	SULFIDE	Sulfide	2/20/23 11:47	0	mg/L
APCO-GS-CCB-MW-1	TEMP	Temperature	2/20/23 11:47	19.59	C
APCO-GS-CCB-MW-1	TURB	Turbidity	2/20/23 11:47	0.73	NTU
APCO-GS-CCB-MW-2	COND	Conductivity	2/20/23 13:18	1774.73	uS/cm
APCO-GS-CCB-MW-2	DO	DO	2/20/23 13:18	0.85	mg/L
APCO-GS-CCB-MW-2	DTW	Depth to Water Detail	2/20/23 13:18	83.43	ft
APCO-GS-CCB-MW-2	ORP	Oxidation Reduction Potention	2/20/23 13:18	71.78	mv
APCO-GS-CCB-MW-2	PH	pH	2/20/23 13:18	6.22	SU
APCO-GS-CCB-MW-2	TEMP	Temperature	2/20/23 13:18	19	C
APCO-GS-CCB-MW-2	TURB	Turbidity	2/20/23 13:18	0.72	NTU
APCO-GS-CCB-MW-2	COND	Conductivity	2/20/23 13:23	1773.88	uS/cm
APCO-GS-CCB-MW-2	DO	DO	2/20/23 13:23	0.85	mg/L
APCO-GS-CCB-MW-2	DTW	Depth to Water Detail	2/20/23 13:23	83.43	ft
APCO-GS-CCB-MW-2	ORP	Oxidation Reduction Potention	2/20/23 13:23	71.83	mv
APCO-GS-CCB-MW-2	PH	pH	2/20/23 13:23	6.23	SU
APCO-GS-CCB-MW-2	TEMP	Temperature	2/20/23 13:23	19	C
APCO-GS-CCB-MW-2	TURB	Turbidity	2/20/23 13:23	0.94	NTU
APCO-GS-CCB-MW-2	COND	Conductivity	2/20/23 13:28	1772.4	uS/cm
APCO-GS-CCB-MW-2	DO	DO	2/20/23 13:28	0.83	mg/L
APCO-GS-CCB-MW-2	DTW	Depth to Water Detail	2/20/23 13:28	83.43	ft
APCO-GS-CCB-MW-2	ORP	Oxidation Reduction Potention	2/20/23 13:28	72.2	mv
APCO-GS-CCB-MW-2	PH	pH	2/20/23 13:28	6.24	SU
APCO-GS-CCB-MW-2	TEMP	Temperature	2/20/23 13:28	18.98	C
APCO-GS-CCB-MW-2	TURB	Turbidity	2/20/23 13:28	0.47	NTU
APCO-GS-CCB-MW-2	COND	Conductivity	2/20/23 13:33	1773	uS/cm
APCO-GS-CCB-MW-2	DO	DO	2/20/23 13:33	0.82	mg/L
APCO-GS-CCB-MW-2	DTW	Depth to Water Detail	2/20/23 13:33	83.43	ft
APCO-GS-CCB-MW-2	ORP	Oxidation Reduction Potention	2/20/23 13:33	72.91	mv
APCO-GS-CCB-MW-2	PH	pH	2/20/23 13:33	6.24	SU

APCO-GS-CCB-MW-2	SULFIDE	Sulfide	2/20/23 13:33	0	mg/L
APCO-GS-CCB-MW-2	TEMP	Temperature	2/20/23 13:33	18.95	C
APCO-GS-CCB-MW-2	TURB	Turbidity	2/20/23 13:33	0.41	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:18	3845.31	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:18	7.15	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:18	107.22	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:18	307.8	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:18	4.94	SU
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:18	20.98	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:18	3.67	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:23	3460.97	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:23	6.52	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:23	107.24	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:23	273.35	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:23	5.74	SU
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:23	20.86	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:23	12.9	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:28	3297.44	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:28	6.36	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:28	107.26	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:28	243.1	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:28	5.97	SU
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:28	20.74	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:28	11.5	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:33	3289.62	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:33	6.25	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:33	107.28	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:33	235.2	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:33	5.99	SU
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:33	20.53	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:33	7.21	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:38	3282.07	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:38	6.17	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:38	107.3	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:38	233.18	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:38	6	SU
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:38	20.41	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:38	3.72	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:43	3280.04	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:43	6.2	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:43	107.32	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:43	232.49	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:43	6.01	SU
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:43	20.36	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:43	2.34	NTU
APCO-GS-CCB-MW-3	COND	Conductivity	2/20/23 14:48	3276.9	uS/cm
APCO-GS-CCB-MW-3	DO	DO	2/20/23 14:48	6.19	mg/L
APCO-GS-CCB-MW-3	DTW	Depth to Water Detail	2/20/23 14:48	107.33	ft
APCO-GS-CCB-MW-3	ORP	Oxidation Reduction Potention	2/20/23 14:48	231.95	mv
APCO-GS-CCB-MW-3	PH	pH	2/20/23 14:48	6.01	SU
APCO-GS-CCB-MW-3	SULFIDE	Sulfide	2/20/23 14:48	0	mg/L
APCO-GS-CCB-MW-3	TEMP	Temperature	2/20/23 14:48	20.34	C
APCO-GS-CCB-MW-3	TURB	Turbidity	2/20/23 14:48	1.21	NTU
APCO-GS-CCB-MW-4	COND	Conductivity	2/21/23 9:30	3246.86	uS/cm
APCO-GS-CCB-MW-4	DO	DO	2/21/23 9:30	2.8	mg/L
APCO-GS-CCB-MW-4	DTW	Depth to Water Detail	2/21/23 9:30	116.03	ft
APCO-GS-CCB-MW-4	ORP	Oxidation Reduction Potention	2/21/23 9:30	213.78	mv
APCO-GS-CCB-MW-4	PH	pH	2/21/23 9:30	6.33	SU
APCO-GS-CCB-MW-4	TEMP	Temperature	2/21/23 9:30	19.7	C
APCO-GS-CCB-MW-4	TURB	Turbidity	2/21/23 9:30	2.34	NTU
APCO-GS-CCB-MW-4	COND	Conductivity	2/21/23 9:35	3228.3	uS/cm
APCO-GS-CCB-MW-4	DO	DO	2/21/23 9:35	2.79	mg/L
APCO-GS-CCB-MW-4	DTW	Depth to Water Detail	2/21/23 9:35	116.03	ft

Plant Gorgas CCB Landfills
Field Parameter Summary

APCO-GS-CCB-MW-4	ORP	Oxidation Reduction Potention	2/21/23 9:35	214.38	mv
APCO-GS-CCB-MW-4	PH	pH	2/21/23 9:35	6.33	SU
APCO-GS-CCB-MW-4	TEMP	Temperature	2/21/23 9:35	19.65	C
APCO-GS-CCB-MW-4	TURB	Turbidity	2/21/23 9:35	1.59	NTU
APCO-GS-CCB-MW-4	COND	Conductivity	2/21/23 9:40	3207.87	uS/cm
APCO-GS-CCB-MW-4	DO	DO	2/21/23 9:40	2.9	mg/L
APCO-GS-CCB-MW-4	DTW	Depth to Water Detail	2/21/23 9:40	116.03	ft
APCO-GS-CCB-MW-4	ORP	Oxidation Reduction Potention	2/21/23 9:40	215.67	mv
APCO-GS-CCB-MW-4	PH	pH	2/21/23 9:40	6.34	SU
APCO-GS-CCB-MW-4	TEMP	Temperature	2/21/23 9:40	19.6	C
APCO-GS-CCB-MW-4	TURB	Turbidity	2/21/23 9:40	1.25	NTU
APCO-GS-CCB-MW-4	COND	Conductivity	2/21/23 9:45	3197.25	uS/cm
APCO-GS-CCB-MW-4	DO	DO	2/21/23 9:45	3.04	mg/L
APCO-GS-CCB-MW-4	DTW	Depth to Water Detail	2/21/23 9:45	116.03	ft
APCO-GS-CCB-MW-4	ORP	Oxidation Reduction Potention	2/21/23 9:45	216.9	mv
APCO-GS-CCB-MW-4	PH	pH	2/21/23 9:45	6.34	SU
APCO-GS-CCB-MW-4	TEMP	Temperature	2/21/23 9:45	19.59	C
APCO-GS-CCB-MW-4	TURB	Turbidity	2/21/23 9:45	1.22	NTU
APCO-GS-CCB-MW-4	COND	Conductivity	2/21/23 9:50	3189.48	uS/cm
APCO-GS-CCB-MW-4	DO	DO	2/21/23 9:50	3.13	mg/L
APCO-GS-CCB-MW-4	DTW	Depth to Water Detail	2/21/23 9:50	116.03	ft
APCO-GS-CCB-MW-4	ORP	Oxidation Reduction Potention	2/21/23 9:50	217.91	mv
APCO-GS-CCB-MW-4	PH	pH	2/21/23 9:50	6.35	SU
APCO-GS-CCB-MW-4	TEMP	Temperature	2/21/23 9:50	19.6	C
APCO-GS-CCB-MW-4	TURB	Turbidity	2/21/23 9:50	1.2	NTU
APCO-GS-CCB-MW-4	COND	Conductivity	2/21/23 9:55	3184.95	uS/cm
APCO-GS-CCB-MW-4	DO	DO	2/21/23 9:55	3.15	mg/L
APCO-GS-CCB-MW-4	DTW	Depth to Water Detail	2/21/23 9:55	116.03	ft
APCO-GS-CCB-MW-4	ORP	Oxidation Reduction Potention	2/21/23 9:55	219	mv
APCO-GS-CCB-MW-4	PH	pH	2/21/23 9:55	6.35	SU
APCO-GS-CCB-MW-4	SULFIDE	Sulfide	2/21/23 9:55	0	mg/L
APCO-GS-CCB-MW-4	TEMP	Temperature	2/21/23 9:55	19.61	C
APCO-GS-CCB-MW-4	TURB	Turbidity	2/21/23 9:55	0.72	NTU
APCO-GS-CCB-MW-11	COND	Conductivity	2/21/23 14:57	2626.49	uS/cm
APCO-GS-CCB-MW-11	DO	DO	2/21/23 14:57	0.29	mg/L
APCO-GS-CCB-MW-11	DTW	Depth to Water Detail	2/21/23 14:57	106.08	ft
APCO-GS-CCB-MW-11	ORP	Oxidation Reduction Potention	2/21/23 14:57	-52.81	mv
APCO-GS-CCB-MW-11	PH	pH	2/21/23 14:57	6.82	SU
APCO-GS-CCB-MW-11	TEMP	Temperature	2/21/23 14:57	20.33	C
APCO-GS-CCB-MW-11	TURB	Turbidity	2/21/23 14:57	0.97	NTU
APCO-GS-CCB-MW-11	COND	Conductivity	2/21/23 15:02	2616.81	uS/cm
APCO-GS-CCB-MW-11	DO	DO	2/21/23 15:02	0.2	mg/L
APCO-GS-CCB-MW-11	DTW	Depth to Water Detail	2/21/23 15:02	108.7	ft
APCO-GS-CCB-MW-11	ORP	Oxidation Reduction Potention	2/21/23 15:02	-57.73	mv
APCO-GS-CCB-MW-11	PH	pH	2/21/23 15:02	6.8	SU
APCO-GS-CCB-MW-11	TEMP	Temperature	2/21/23 15:02	20.22	C
APCO-GS-CCB-MW-11	TURB	Turbidity	2/21/23 15:02	0.89	NTU
APCO-GS-CCB-MW-11	COND	Conductivity	2/21/23 15:07	2614.17	uS/cm
APCO-GS-CCB-MW-11	DO	DO	2/21/23 15:07	0.19	mg/L
APCO-GS-CCB-MW-11	DTW	Depth to Water Detail	2/21/23 15:07	110.54	ft
APCO-GS-CCB-MW-11	ORP	Oxidation Reduction Potention	2/21/23 15:07	-60.02	mv
APCO-GS-CCB-MW-11	PH	pH	2/21/23 15:07	6.79	SU
APCO-GS-CCB-MW-11	TEMP	Temperature	2/21/23 15:07	20.16	C
APCO-GS-CCB-MW-11	TURB	Turbidity	2/21/23 15:07	0.92	NTU
APCO-GS-CCB-MW-11	COND	Conductivity	2/21/23 15:12	2609.79	uS/cm
APCO-GS-CCB-MW-11	DO	DO	2/21/23 15:12	0.32	mg/L
APCO-GS-CCB-MW-11	DTW	Depth to Water Detail	2/21/23 15:12	110.46	ft
APCO-GS-CCB-MW-11	ORP	Oxidation Reduction Potention	2/21/23 15:12	-61.21	mv
APCO-GS-CCB-MW-11	PH	pH	2/21/23 15:12	6.79	SU
APCO-GS-CCB-MW-11	TEMP	Temperature	2/21/23 15:12	20.15	C
APCO-GS-CCB-MW-11	TURB	Turbidity	2/21/23 15:12	0.78	NTU
APCO-GS-CCB-MW-11	COND	Conductivity	2/21/23 15:17	2605.62	uS/cm
APCO-GS-CCB-MW-11	DO	DO	2/21/23 15:17	0.4	mg/L

Plant Gorgas CCB Landfills
Field Parameter Summary

APCO-GS-CCB-MW-11	DTW	Depth to Water Detail	2/21/23 15:17	110.43	ft
APCO-GS-CCB-MW-11	ORP	Oxidation Reduction Potention	2/21/23 15:17	-61.73	mv
APCO-GS-CCB-MW-11	PH	pH	2/21/23 15:17	6.78	SU
APCO-GS-CCB-MW-11	TEMP	Temperature	2/21/23 15:17	20.19	C
APCO-GS-CCB-MW-11	TURB	Turbidity	2/21/23 15:17	0.84	NTU
APCO-GS-CCB-MW-11	COND	Conductivity	2/21/23 15:22	2597.79	uS/cm
APCO-GS-CCB-MW-11	DO	DO	2/21/23 15:22	0.42	mg/L
APCO-GS-CCB-MW-11	DTW	Depth to Water Detail	2/21/23 15:22	110.43	ft
APCO-GS-CCB-MW-11	ORP	Oxidation Reduction Potention	2/21/23 15:22	-62.9	mv
APCO-GS-CCB-MW-11	PH	pH	2/21/23 15:22	6.77	SU
APCO-GS-CCB-MW-11	SULFIDE	Sulfide	2/21/23 15:22	0	mg/L
APCO-GS-CCB-MW-11	TEMP	Temperature	2/21/23 15:22	20.11	C
APCO-GS-CCB-MW-11	TURB	Turbidity	2/21/23 15:22	0.8	NTU
APCO-GS-CCB-MW-12	COND	Conductivity	2/22/23 13:29	3451.82	uS/cm
APCO-GS-CCB-MW-12	DO	DO	2/22/23 13:29	1.25	mg/L
APCO-GS-CCB-MW-12	DTW	Depth to Water Detail	2/22/23 13:29	154.72	ft
APCO-GS-CCB-MW-12	ORP	Oxidation Reduction Potention	2/22/23 13:29	20.37	mv
APCO-GS-CCB-MW-12	PH	pH	2/22/23 13:29	5.66	SU
APCO-GS-CCB-MW-12	TEMP	Temperature	2/22/23 13:29	22.35	C
APCO-GS-CCB-MW-12	TURB	Turbidity	2/22/23 13:29	5.21	NTU
APCO-GS-CCB-MW-12	COND	Conductivity	2/22/23 13:34	3511.79	uS/cm
APCO-GS-CCB-MW-12	DO	DO	2/22/23 13:34	0.41	mg/L
APCO-GS-CCB-MW-12	DTW	Depth to Water Detail	2/22/23 13:34	154.72	ft
APCO-GS-CCB-MW-12	ORP	Oxidation Reduction Potention	2/22/23 13:34	10.43	mv
APCO-GS-CCB-MW-12	PH	pH	2/22/23 13:34	5.69	SU
APCO-GS-CCB-MW-12	TEMP	Temperature	2/22/23 13:34	22.29	C
APCO-GS-CCB-MW-12	TURB	Turbidity	2/22/23 13:34	4.38	NTU
APCO-GS-CCB-MW-12	COND	Conductivity	2/22/23 13:39	3553.77	uS/cm
APCO-GS-CCB-MW-12	DO	DO	2/22/23 13:39	0.3	mg/L
APCO-GS-CCB-MW-12	DTW	Depth to Water Detail	2/22/23 13:39	154.72	ft
APCO-GS-CCB-MW-12	ORP	Oxidation Reduction Potention	2/22/23 13:39	8.27	mv
APCO-GS-CCB-MW-12	PH	pH	2/22/23 13:39	5.7	SU
APCO-GS-CCB-MW-12	TEMP	Temperature	2/22/23 13:39	22.33	C
APCO-GS-CCB-MW-12	TURB	Turbidity	2/22/23 13:39	3.95	NTU
APCO-GS-CCB-MW-12	COND	Conductivity	2/22/23 13:44	3585.09	uS/cm
APCO-GS-CCB-MW-12	DO	DO	2/22/23 13:44	0.28	mg/L
APCO-GS-CCB-MW-12	DTW	Depth to Water Detail	2/22/23 13:44	154.72	ft
APCO-GS-CCB-MW-12	ORP	Oxidation Reduction Potention	2/22/23 13:44	7.95	mv
APCO-GS-CCB-MW-12	PH	pH	2/22/23 13:44	5.72	SU
APCO-GS-CCB-MW-12	SULFIDE	Sulfide	2/22/23 13:44	0	mg/L
APCO-GS-CCB-MW-12	TEMP	Temperature	2/22/23 13:44	21.83	C
APCO-GS-CCB-MW-12	TURB	Turbidity	2/22/23 13:44	3.81	NTU
APCO-GS-CCB-MW-12V	COND	Conductivity	2/22/23 12:12	2659.72	uS/cm
APCO-GS-CCB-MW-12V	DO	DO	2/22/23 12:12	0.75	mg/L
APCO-GS-CCB-MW-12V	DTW	Depth to Water Detail	2/22/23 12:12	157.4	ft
APCO-GS-CCB-MW-12V	ORP	Oxidation Reduction Potention	2/22/23 12:12	-100.06	mv
APCO-GS-CCB-MW-12V	PH	pH	2/22/23 12:12	6.95	SU
APCO-GS-CCB-MW-12V	TEMP	Temperature	2/22/23 12:12	22.89	C
APCO-GS-CCB-MW-12V	TURB	Turbidity	2/22/23 12:12	3.08	NTU
APCO-GS-CCB-MW-12V	COND	Conductivity	2/22/23 12:17	2670.85	uS/cm
APCO-GS-CCB-MW-12V	DO	DO	2/22/23 12:17	0.47	mg/L
APCO-GS-CCB-MW-12V	DTW	Depth to Water Detail	2/22/23 12:17	157.76	ft
APCO-GS-CCB-MW-12V	ORP	Oxidation Reduction Potention	2/22/23 12:17	-98.12	mv
APCO-GS-CCB-MW-12V	PH	pH	2/22/23 12:17	6.95	SU
APCO-GS-CCB-MW-12V	TEMP	Temperature	2/22/23 12:17	22.75	C
APCO-GS-CCB-MW-12V	TURB	Turbidity	2/22/23 12:17	2.21	NTU
APCO-GS-CCB-MW-12V	COND	Conductivity	2/22/23 12:22	2672.06	uS/cm
APCO-GS-CCB-MW-12V	DO	DO	2/22/23 12:22	0.41	mg/L
APCO-GS-CCB-MW-12V	DTW	Depth to Water Detail	2/22/23 12:22	158	ft
APCO-GS-CCB-MW-12V	ORP	Oxidation Reduction Potention	2/22/23 12:22	-96.03	mv
APCO-GS-CCB-MW-12V	PH	pH	2/22/23 12:22	6.95	SU
APCO-GS-CCB-MW-12V	TEMP	Temperature	2/22/23 12:22	22.59	C
APCO-GS-CCB-MW-12V	TURB	Turbidity	2/22/23 12:22	2.43	NTU

APCO-GS-CCB-MW-12V	COND	Conductivity	2/22/23 12:27	2674.21	uS/cm
APCO-GS-CCB-MW-12V	DO	DO	2/22/23 12:27	0.41	mg/L
APCO-GS-CCB-MW-12V	DTW	Depth to Water Detail	2/22/23 12:27	158.11	ft
APCO-GS-CCB-MW-12V	ORP	Oxidation Reduction Potention	2/22/23 12:27	-94.08	mv
APCO-GS-CCB-MW-12V	PH	pH	2/22/23 12:27	6.95	SU
APCO-GS-CCB-MW-12V	TEMP	Temperature	2/22/23 12:27	22.71	C
APCO-GS-CCB-MW-12V	TURB	Turbidity	2/22/23 12:27	1.91	NTU
APCO-GS-CCB-MW-12V	COND	Conductivity	2/22/23 12:32	2671.7	uS/cm
APCO-GS-CCB-MW-12V	DO	DO	2/22/23 12:32	0.45	mg/L
APCO-GS-CCB-MW-12V	DTW	Depth to Water Detail	2/22/23 12:32	158.2	ft
APCO-GS-CCB-MW-12V	ORP	Oxidation Reduction Potention	2/22/23 12:32	-92.09	mv
APCO-GS-CCB-MW-12V	PH	pH	2/22/23 12:32	6.95	SU
APCO-GS-CCB-MW-12V	SULFIDE	Sulfide	2/22/23 12:32	0	mg/L
APCO-GS-CCB-MW-12V	TEMP	Temperature	2/22/23 12:32	22.78	C
APCO-GS-CCB-MW-12V	TURB	Turbidity	2/22/23 12:32	1.96	NTU
APCO-GS-CCB-MW-13	COND	Conductivity	2/20/23 10:44	2336.35	uS/cm
APCO-GS-CCB-MW-13	DO	DO	2/20/23 10:44	0.97	mg/L
APCO-GS-CCB-MW-13	DTW	Depth to Water Detail	2/20/23 10:44	94.13	ft
APCO-GS-CCB-MW-13	ORP	Oxidation Reduction Potention	2/20/23 10:44	84.75	mv
APCO-GS-CCB-MW-13	PH	pH	2/20/23 10:44	6.46	SU
APCO-GS-CCB-MW-13	TEMP	Temperature	2/20/23 10:44	19.01	C
APCO-GS-CCB-MW-13	TURB	Turbidity	2/20/23 10:44	1.98	NTU
APCO-GS-CCB-MW-13	COND	Conductivity	2/20/23 10:49	2238.28	uS/cm
APCO-GS-CCB-MW-13	DO	DO	2/20/23 10:49	0.49	mg/L
APCO-GS-CCB-MW-13	DTW	Depth to Water Detail	2/20/23 10:49	94.24	ft
APCO-GS-CCB-MW-13	ORP	Oxidation Reduction Potention	2/20/23 10:49	90.52	mv
APCO-GS-CCB-MW-13	PH	pH	2/20/23 10:49	6.56	SU
APCO-GS-CCB-MW-13	TEMP	Temperature	2/20/23 10:49	19.04	C
APCO-GS-CCB-MW-13	TURB	Turbidity	2/20/23 10:49	1.56	NTU
APCO-GS-CCB-MW-13	COND	Conductivity	2/20/23 10:54	2218.64	uS/cm
APCO-GS-CCB-MW-13	DO	DO	2/20/23 10:54	0.56	mg/L
APCO-GS-CCB-MW-13	DTW	Depth to Water Detail	2/20/23 10:54	94.28	ft
APCO-GS-CCB-MW-13	ORP	Oxidation Reduction Potention	2/20/23 10:54	92.25	mv
APCO-GS-CCB-MW-13	PH	pH	2/20/23 10:54	6.57	SU
APCO-GS-CCB-MW-13	TEMP	Temperature	2/20/23 10:54	19.05	C
APCO-GS-CCB-MW-13	TURB	Turbidity	2/20/23 10:54	1.63	NTU
APCO-GS-CCB-MW-13	COND	Conductivity	2/20/23 10:59	2211.86	uS/cm
APCO-GS-CCB-MW-13	DO	DO	2/20/23 10:59	0.57	mg/L
APCO-GS-CCB-MW-13	DTW	Depth to Water Detail	2/20/23 10:59	94.32	ft
APCO-GS-CCB-MW-13	ORP	Oxidation Reduction Potention	2/20/23 10:59	89.49	mv
APCO-GS-CCB-MW-13	PH	pH	2/20/23 10:59	6.58	SU
APCO-GS-CCB-MW-13	SULFIDE	Sulfide	2/20/23 10:59	0	mg/L
APCO-GS-CCB-MW-13	TEMP	Temperature	2/20/23 10:59	18.98	C
APCO-GS-CCB-MW-13	TURB	Turbidity	2/20/23 10:59	1.6	NTU
APCO-GS-CCB-MW-14	COND	Conductivity	2/20/23 11:44	2873.68	uS/cm
APCO-GS-CCB-MW-14	DO	DO	2/20/23 11:44	0.24	mg/L
APCO-GS-CCB-MW-14	DTW	Depth to Water Detail	2/20/23 11:44	89.16	ft
APCO-GS-CCB-MW-14	ORP	Oxidation Reduction Potention	2/20/23 11:44	25.26	mv
APCO-GS-CCB-MW-14	PH	pH	2/20/23 11:44	6.44	SU
APCO-GS-CCB-MW-14	TEMP	Temperature	2/20/23 11:44	19.07	C
APCO-GS-CCB-MW-14	TURB	Turbidity	2/20/23 11:44	3.88	NTU
APCO-GS-CCB-MW-14	COND	Conductivity	2/20/23 11:49	2873.44	uS/cm
APCO-GS-CCB-MW-14	DO	DO	2/20/23 11:49	0.18	mg/L
APCO-GS-CCB-MW-14	DTW	Depth to Water Detail	2/20/23 11:49	89.16	ft
APCO-GS-CCB-MW-14	ORP	Oxidation Reduction Potention	2/20/23 11:49	11.9	mv
APCO-GS-CCB-MW-14	PH	pH	2/20/23 11:49	6.44	SU
APCO-GS-CCB-MW-14	TEMP	Temperature	2/20/23 11:49	18.96	C
APCO-GS-CCB-MW-14	TURB	Turbidity	2/20/23 11:49	4.51	NTU
APCO-GS-CCB-MW-14	COND	Conductivity	2/20/23 11:54	2855.22	uS/cm
APCO-GS-CCB-MW-14	DO	DO	2/20/23 11:54	0.18	mg/L
APCO-GS-CCB-MW-14	DTW	Depth to Water Detail	2/20/23 11:54	89.16	ft
APCO-GS-CCB-MW-14	ORP	Oxidation Reduction Potention	2/20/23 11:54	7.65	mv
APCO-GS-CCB-MW-14	PH	pH	2/20/23 11:54	6.44	SU

APCO-GS-CCB-MW-14	TEMP	Temperature	2/20/23 11:54	18.95	C
APCO-GS-CCB-MW-14	TURB	Turbidity	2/20/23 11:54	2.69	NTU
APCO-GS-CCB-MW-14	COND	Conductivity	2/20/23 11:59	2825.5	uS/cm
APCO-GS-CCB-MW-14	DO	DO	2/20/23 11:59	0.21	mg/L
APCO-GS-CCB-MW-14	DTW	Depth to Water Detail	2/20/23 11:59	89.16	ft
APCO-GS-CCB-MW-14	ORP	Oxidation Reduction Potention	2/20/23 11:59	6.39	mv
APCO-GS-CCB-MW-14	PH	pH	2/20/23 11:59	6.45	SU
APCO-GS-CCB-MW-14	SULFIDE	Sulfide	2/20/23 11:59	0	mg/L
APCO-GS-CCB-MW-14	TEMP	Temperature	2/20/23 11:59	19.03	C
APCO-GS-CCB-MW-14	TURB	Turbidity	2/20/23 11:59	2.26	NTU
APCO-GS-CCB-MW-15	COND	Conductivity	2/20/23 12:54	2401.92	uS/cm
APCO-GS-CCB-MW-15	DO	DO	2/20/23 12:54	0.26	mg/L
APCO-GS-CCB-MW-15	DTW	Depth to Water Detail	2/20/23 12:54	67.96	ft
APCO-GS-CCB-MW-15	ORP	Oxidation Reduction Potention	2/20/23 12:54	9.58	mv
APCO-GS-CCB-MW-15	PH	pH	2/20/23 12:54	6.01	SU
APCO-GS-CCB-MW-15	TEMP	Temperature	2/20/23 12:54	18.84	C
APCO-GS-CCB-MW-15	TURB	Turbidity	2/20/23 12:54	16.6	NTU
APCO-GS-CCB-MW-15	COND	Conductivity	2/20/23 12:59	2387.86	uS/cm
APCO-GS-CCB-MW-15	DO	DO	2/20/23 12:59	1.01	mg/L
APCO-GS-CCB-MW-15	DTW	Depth to Water Detail	2/20/23 12:59	67.96	ft
APCO-GS-CCB-MW-15	ORP	Oxidation Reduction Potention	2/20/23 12:59	19.62	mv
APCO-GS-CCB-MW-15	PH	pH	2/20/23 12:59	5.99	SU
APCO-GS-CCB-MW-15	TEMP	Temperature	2/20/23 12:59	18.94	C
APCO-GS-CCB-MW-15	TURB	Turbidity	2/20/23 12:59	11.2	NTU
APCO-GS-CCB-MW-15	COND	Conductivity	2/20/23 13:04	2388.07	uS/cm
APCO-GS-CCB-MW-15	DO	DO	2/20/23 13:04	0.46	mg/L
APCO-GS-CCB-MW-15	DTW	Depth to Water Detail	2/20/23 13:04	67.96	ft
APCO-GS-CCB-MW-15	ORP	Oxidation Reduction Potention	2/20/23 13:04	8.84	mv
APCO-GS-CCB-MW-15	PH	pH	2/20/23 13:04	6.04	SU
APCO-GS-CCB-MW-15	TEMP	Temperature	2/20/23 13:04	18.89	C
APCO-GS-CCB-MW-15	TURB	Turbidity	2/20/23 13:04	7.21	NTU
APCO-GS-CCB-MW-15	COND	Conductivity	2/20/23 13:09	2387.01	uS/cm
APCO-GS-CCB-MW-15	DO	DO	2/20/23 13:09	0.2	mg/L
APCO-GS-CCB-MW-15	DTW	Depth to Water Detail	2/20/23 13:09	67.96	ft
APCO-GS-CCB-MW-15	ORP	Oxidation Reduction Potention	2/20/23 13:09	3.52	mv
APCO-GS-CCB-MW-15	PH	pH	2/20/23 13:09	6.06	SU
APCO-GS-CCB-MW-15	TEMP	Temperature	2/20/23 13:09	18.86	C
APCO-GS-CCB-MW-15	TURB	Turbidity	2/20/23 13:09	6.32	NTU
APCO-GS-CCB-MW-15	COND	Conductivity	2/20/23 13:14	2389.42	uS/cm
APCO-GS-CCB-MW-15	DO	DO	2/20/23 13:14	0.15	mg/L
APCO-GS-CCB-MW-15	DTW	Depth to Water Detail	2/20/23 13:14	67.96	ft
APCO-GS-CCB-MW-15	ORP	Oxidation Reduction Potention	2/20/23 13:14	0.89	mv
APCO-GS-CCB-MW-15	PH	pH	2/20/23 13:14	6.08	SU
APCO-GS-CCB-MW-15	SULFIDE	Sulfide	2/20/23 13:14	0	mg/L
APCO-GS-CCB-MW-15	TEMP	Temperature	2/20/23 13:14	18.93	C
APCO-GS-CCB-MW-15	TURB	Turbidity	2/20/23 13:14	4.88	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:03	2660.46	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:03	0.55	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:03	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:03	-16.82	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:03	6.47	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:03	19.8	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:03	3.29	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:08	2654.16	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:08	0.5	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:08	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:08	-15.21	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:08	6.48	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:08	19.75	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:08	2.98	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:13	2641.99	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:13	0.45	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:13	90.02	ft

Plant Gorgas CCB Landfills
Field Parameter Summary

APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:13	-15.96	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:13	6.5	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:13	19.74	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:13	3.12	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:18	2630.76	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:18	0.49	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:18	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:18	-15.21	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:18	6.51	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:18	19.74	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:18	2.49	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:23	2620.89	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:23	0.56	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:23	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:23	-14.46	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:23	6.52	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:23	19.7	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:23	2.28	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:28	2615.24	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:28	0.49	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:28	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:28	-14.17	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:28	6.53	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:28	19.64	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:28	3.36	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:33	2608.55	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:33	0.55	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:33	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:33	-13.4	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:33	6.53	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:33	19.65	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:33	4.33	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:38	2599.95	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:38	0.53	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:38	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:38	-13.14	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:38	6.53	SU
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:38	19.66	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:38	1.28	NTU
APCO-GS-CCB-MW-16	COND	Conductivity	2/20/23 14:43	2593.82	uS/cm
APCO-GS-CCB-MW-16	DO	DO	2/20/23 14:43	0.47	mg/L
APCO-GS-CCB-MW-16	DTW	Depth to Water Detail	2/20/23 14:43	90.02	ft
APCO-GS-CCB-MW-16	ORP	Oxidation Reduction Potention	2/20/23 14:43	-13.21	mv
APCO-GS-CCB-MW-16	PH	pH	2/20/23 14:43	6.53	SU
APCO-GS-CCB-MW-16	SULFIDE	Sulfide	2/20/23 14:43	0	mg/L
APCO-GS-CCB-MW-16	TEMP	Temperature	2/20/23 14:43	19.63	C
APCO-GS-CCB-MW-16	TURB	Turbidity	2/20/23 14:43	1.66	NTU
APCO-GS-CCB-MW-17R	COND	Conductivity	2/21/23 10:20	3641.2	uS/cm
APCO-GS-CCB-MW-17R	DO	DO	2/21/23 10:20	0.46	mg/L
APCO-GS-CCB-MW-17R	DTW	Depth to Water Detail	2/21/23 10:20	126.16	ft
APCO-GS-CCB-MW-17R	ORP	Oxidation Reduction Potention	2/21/23 10:20	16.98	mv
APCO-GS-CCB-MW-17R	PH	pH	2/21/23 10:20	5.91	SU
APCO-GS-CCB-MW-17R	TEMP	Temperature	2/21/23 10:20	20.44	C
APCO-GS-CCB-MW-17R	TURB	Turbidity	2/21/23 10:20	2.96	NTU
APCO-GS-CCB-MW-17R	COND	Conductivity	2/21/23 10:25	3630.96	uS/cm
APCO-GS-CCB-MW-17R	DO	DO	2/21/23 10:25	0.28	mg/L
APCO-GS-CCB-MW-17R	DTW	Depth to Water Detail	2/21/23 10:25	126.2	ft
APCO-GS-CCB-MW-17R	ORP	Oxidation Reduction Potention	2/21/23 10:25	14.44	mv
APCO-GS-CCB-MW-17R	PH	pH	2/21/23 10:25	5.98	SU
APCO-GS-CCB-MW-17R	TEMP	Temperature	2/21/23 10:25	20.47	C
APCO-GS-CCB-MW-17R	TURB	Turbidity	2/21/23 10:25	2.1	NTU
APCO-GS-CCB-MW-17R	COND	Conductivity	2/21/23 10:30	3610.53	uS/cm
APCO-GS-CCB-MW-17R	DO	DO	2/21/23 10:30	0.24	mg/L

APCO-GS-CCB-MW-17R	DTW	Depth to Water Detail	2/21/23 10:30	126.23	ft
APCO-GS-CCB-MW-17R	ORP	Oxidation Reduction Potention	2/21/23 10:30	9.58	mv
APCO-GS-CCB-MW-17R	PH	pH	2/21/23 10:30	6.04	SU
APCO-GS-CCB-MW-17R	TEMP	Temperature	2/21/23 10:30	20.45	C
APCO-GS-CCB-MW-17R	TURB	Turbidity	2/21/23 10:30	1.84	NTU
APCO-GS-CCB-MW-17R	COND	Conductivity	2/21/23 10:35	3602.75	uS/cm
APCO-GS-CCB-MW-17R	DO	DO	2/21/23 10:35	0.23	mg/L
APCO-GS-CCB-MW-17R	DTW	Depth to Water Detail	2/21/23 10:35	126.25	ft
APCO-GS-CCB-MW-17R	ORP	Oxidation Reduction Potention	2/21/23 10:35	8.15	mv
APCO-GS-CCB-MW-17R	PH	pH	2/21/23 10:35	6.07	SU
APCO-GS-CCB-MW-17R	SULFIDE	Sulfide	2/21/23 10:35	0	mg/L
APCO-GS-CCB-MW-17R	TEMP	Temperature	2/21/23 10:35	20.41	C
APCO-GS-CCB-MW-17R	TURB	Turbidity	2/21/23 10:35	1.8	NTU
APCO-GS-CCB-MW-18	COND	Conductivity	2/21/23 11:22	2624.62	uS/cm
APCO-GS-CCB-MW-18	DO	DO	2/21/23 11:22	4.24	mg/L
APCO-GS-CCB-MW-18	DTW	Depth to Water Detail	2/21/23 11:22	110.98	ft
APCO-GS-CCB-MW-18	ORP	Oxidation Reduction Potention	2/21/23 11:22	96.23	mv
APCO-GS-CCB-MW-18	PH	pH	2/21/23 11:22	6.63	SU
APCO-GS-CCB-MW-18	TEMP	Temperature	2/21/23 11:22	19.73	C
APCO-GS-CCB-MW-18	TURB	Turbidity	2/21/23 11:22	1.43	NTU
APCO-GS-CCB-MW-18	COND	Conductivity	2/21/23 11:27	2622.66	uS/cm
APCO-GS-CCB-MW-18	DO	DO	2/21/23 11:27	4.23	mg/L
APCO-GS-CCB-MW-18	DTW	Depth to Water Detail	2/21/23 11:27	110.98	ft
APCO-GS-CCB-MW-18	ORP	Oxidation Reduction Potention	2/21/23 11:27	107.58	mv
APCO-GS-CCB-MW-18	PH	pH	2/21/23 11:27	6.63	SU
APCO-GS-CCB-MW-18	TEMP	Temperature	2/21/23 11:27	19.73	C
APCO-GS-CCB-MW-18	TURB	Turbidity	2/21/23 11:27	1.11	NTU
APCO-GS-CCB-MW-18	COND	Conductivity	2/21/23 11:32	2625.28	uS/cm
APCO-GS-CCB-MW-18	DO	DO	2/21/23 11:32	4.22	mg/L
APCO-GS-CCB-MW-18	DTW	Depth to Water Detail	2/21/23 11:32	110.98	ft
APCO-GS-CCB-MW-18	ORP	Oxidation Reduction Potention	2/21/23 11:32	115.31	mv
APCO-GS-CCB-MW-18	PH	pH	2/21/23 11:32	6.63	SU
APCO-GS-CCB-MW-18	TEMP	Temperature	2/21/23 11:32	19.74	C
APCO-GS-CCB-MW-18	TURB	Turbidity	2/21/23 11:32	0.91	NTU
APCO-GS-CCB-MW-18	COND	Conductivity	2/21/23 11:37	2625.69	uS/cm
APCO-GS-CCB-MW-18	DO	DO	2/21/23 11:37	4.21	mg/L
APCO-GS-CCB-MW-18	DTW	Depth to Water Detail	2/21/23 11:37	110.98	ft
APCO-GS-CCB-MW-18	ORP	Oxidation Reduction Potention	2/21/23 11:37	121.11	mv
APCO-GS-CCB-MW-18	PH	pH	2/21/23 11:37	6.63	SU
APCO-GS-CCB-MW-18	SULFIDE	Sulfide	2/21/23 11:37	0	mg/L
APCO-GS-CCB-MW-18	TEMP	Temperature	2/21/23 11:37	19.76	C
APCO-GS-CCB-MW-18	TURB	Turbidity	2/21/23 11:37	0.87	NTU
APCO-GS-CCB-MW-19	COND	Conductivity	2/21/23 12:28	2948.29	uS/cm
APCO-GS-CCB-MW-19	DO	DO	2/21/23 12:28	0.18	mg/L
APCO-GS-CCB-MW-19	DTW	Depth to Water Detail	2/21/23 12:28	78.51	ft
APCO-GS-CCB-MW-19	ORP	Oxidation Reduction Potention	2/21/23 12:28	43.39	mv
APCO-GS-CCB-MW-19	PH	pH	2/21/23 12:28	6.31	SU
APCO-GS-CCB-MW-19	TEMP	Temperature	2/21/23 12:28	19.19	C
APCO-GS-CCB-MW-19	TURB	Turbidity	2/21/23 12:28	3.23	NTU
APCO-GS-CCB-MW-19	COND	Conductivity	2/21/23 12:33	2968.08	uS/cm
APCO-GS-CCB-MW-19	DO	DO	2/21/23 12:33	0.14	mg/L
APCO-GS-CCB-MW-19	DTW	Depth to Water Detail	2/21/23 12:33	78.51	ft
APCO-GS-CCB-MW-19	ORP	Oxidation Reduction Potention	2/21/23 12:33	40.27	mv
APCO-GS-CCB-MW-19	PH	pH	2/21/23 12:33	6.32	SU
APCO-GS-CCB-MW-19	TEMP	Temperature	2/21/23 12:33	19.14	C
APCO-GS-CCB-MW-19	TURB	Turbidity	2/21/23 12:33	2.42	NTU
APCO-GS-CCB-MW-19	COND	Conductivity	2/21/23 12:38	2970.58	uS/cm
APCO-GS-CCB-MW-19	DO	DO	2/21/23 12:38	0.12	mg/L
APCO-GS-CCB-MW-19	DTW	Depth to Water Detail	2/21/23 12:38	78.51	ft
APCO-GS-CCB-MW-19	ORP	Oxidation Reduction Potention	2/21/23 12:38	38.52	mv
APCO-GS-CCB-MW-19	PH	pH	2/21/23 12:38	6.32	SU
APCO-GS-CCB-MW-19	TEMP	Temperature	2/21/23 12:38	19.21	C
APCO-GS-CCB-MW-19	TURB	Turbidity	2/21/23 12:38	2.31	NTU

Plant Gorgas CCB Landfills
Field Parameter Summary

APCO-GS-CCB-MW-19	COND	Conductivity	2/21/23 12:43	2971.83	uS/cm
APCO-GS-CCB-MW-19	DO	DO	2/21/23 12:43	0.12	mg/L
APCO-GS-CCB-MW-19	DTW	Depth to Water Detail	2/21/23 12:43	78.51	ft
APCO-GS-CCB-MW-19	ORP	Oxidation Reduction Potention	2/21/23 12:43	37.82	mv
APCO-GS-CCB-MW-19	PH	pH	2/21/23 12:43	6.32	SU
APCO-GS-CCB-MW-19	SULFIDE	Sulfide	2/21/23 12:43	0	mg/L
APCO-GS-CCB-MW-19	TEMP	Temperature	2/21/23 12:43	19.22	C
APCO-GS-CCB-MW-19	TURB	Turbidity	2/21/23 12:43	2.24	NTU
APCO-GS-CCB-MW-20	COND	Conductivity	2/21/23 13:41	2691.14	uS/cm
APCO-GS-CCB-MW-20	DO	DO	2/21/23 13:41	0.09	mg/L
APCO-GS-CCB-MW-20	DTW	Depth to Water Detail	2/21/23 13:41	20.01	ft
APCO-GS-CCB-MW-20	ORP	Oxidation Reduction Potention	2/21/23 13:41	-70.92	mv
APCO-GS-CCB-MW-20	PH	pH	2/21/23 13:41	6.81	SU
APCO-GS-CCB-MW-20	TEMP	Temperature	2/21/23 13:41	19.61	C
APCO-GS-CCB-MW-20	TURB	Turbidity	2/21/23 13:41	0.81	NTU
APCO-GS-CCB-MW-20	COND	Conductivity	2/21/23 13:46	2688.55	uS/cm
APCO-GS-CCB-MW-20	DO	DO	2/21/23 13:46	0.07	mg/L
APCO-GS-CCB-MW-20	DTW	Depth to Water Detail	2/21/23 13:46	20.12	ft
APCO-GS-CCB-MW-20	ORP	Oxidation Reduction Potention	2/21/23 13:46	-73.55	mv
APCO-GS-CCB-MW-20	PH	pH	2/21/23 13:46	6.81	SU
APCO-GS-CCB-MW-20	TEMP	Temperature	2/21/23 13:46	19.52	C
APCO-GS-CCB-MW-20	TURB	Turbidity	2/21/23 13:46	0.9	NTU
APCO-GS-CCB-MW-20	COND	Conductivity	2/21/23 13:51	2684.49	uS/cm
APCO-GS-CCB-MW-20	DO	DO	2/21/23 13:51	0.08	mg/L
APCO-GS-CCB-MW-20	DTW	Depth to Water Detail	2/21/23 13:51	20.24	ft
APCO-GS-CCB-MW-20	ORP	Oxidation Reduction Potention	2/21/23 13:51	-74.9	mv
APCO-GS-CCB-MW-20	PH	pH	2/21/23 13:51	6.81	SU
APCO-GS-CCB-MW-20	TEMP	Temperature	2/21/23 13:51	19.43	C
APCO-GS-CCB-MW-20	TURB	Turbidity	2/21/23 13:51	0.86	NTU
APCO-GS-CCB-MW-20	COND	Conductivity	2/21/23 13:56	2686.59	uS/cm
APCO-GS-CCB-MW-20	DO	DO	2/21/23 13:56	0.07	mg/L
APCO-GS-CCB-MW-20	DTW	Depth to Water Detail	2/21/23 13:56	20.36	ft
APCO-GS-CCB-MW-20	ORP	Oxidation Reduction Potention	2/21/23 13:56	-76.37	mv
APCO-GS-CCB-MW-20	PH	pH	2/21/23 13:56	6.81	SU
APCO-GS-CCB-MW-20	SULFIDE	Sulfide	2/21/23 13:56	0	mg/L
APCO-GS-CCB-MW-20	TEMP	Temperature	2/21/23 13:56	19.48	C
APCO-GS-CCB-MW-20	TURB	Turbidity	2/21/23 13:56	0.84	NTU
APCO-GS-CCB-MW-5	COND	Conductivity	2/21/23 11:53	3404.54	uS/cm
APCO-GS-CCB-MW-5	DO	DO	2/21/23 11:53	3.4	mg/L
APCO-GS-CCB-MW-5	DTW	Depth to Water Detail	2/21/23 11:53	125.98	ft
APCO-GS-CCB-MW-5	ORP	Oxidation Reduction Potention	2/21/23 11:53	-12.42	mv
APCO-GS-CCB-MW-5	PH	pH	2/21/23 11:53	6.63	SU
APCO-GS-CCB-MW-5	TEMP	Temperature	2/21/23 11:53	19.2	C
APCO-GS-CCB-MW-5	TURB	Turbidity	2/21/23 11:53	6.34	NTU
APCO-GS-CCB-MW-5	COND	Conductivity	2/21/23 11:58	3334.06	uS/cm
APCO-GS-CCB-MW-5	DO	DO	2/21/23 11:58	1.6	mg/L
APCO-GS-CCB-MW-5	DTW	Depth to Water Detail	2/21/23 11:58	126	ft
APCO-GS-CCB-MW-5	ORP	Oxidation Reduction Potention	2/21/23 11:58	-9.69	mv
APCO-GS-CCB-MW-5	PH	pH	2/21/23 11:58	6.52	SU
APCO-GS-CCB-MW-5	TEMP	Temperature	2/21/23 11:58	19.25	C
APCO-GS-CCB-MW-5	TURB	Turbidity	2/21/23 11:58	7.65	NTU
APCO-GS-CCB-MW-5	COND	Conductivity	2/21/23 12:03	3312.48	uS/cm
APCO-GS-CCB-MW-5	DO	DO	2/21/23 12:03	1.04	mg/L
APCO-GS-CCB-MW-5	DTW	Depth to Water Detail	2/21/23 12:03	126.02	ft
APCO-GS-CCB-MW-5	ORP	Oxidation Reduction Potention	2/21/23 12:03	-10.82	mv
APCO-GS-CCB-MW-5	PH	pH	2/21/23 12:03	6.49	SU
APCO-GS-CCB-MW-5	TEMP	Temperature	2/21/23 12:03	19.37	C
APCO-GS-CCB-MW-5	TURB	Turbidity	2/21/23 12:03	8.11	NTU
APCO-GS-CCB-MW-5	COND	Conductivity	2/21/23 12:08	3322.97	uS/cm
APCO-GS-CCB-MW-5	DO	DO	2/21/23 12:08	0.88	mg/L
APCO-GS-CCB-MW-5	DTW	Depth to Water Detail	2/21/23 12:08	126.04	ft
APCO-GS-CCB-MW-5	ORP	Oxidation Reduction Potention	2/21/23 12:08	-10.26	mv
APCO-GS-CCB-MW-5	PH	pH	2/21/23 12:08	6.49	SU

APCO-GS-CCB-MW-5	TEMP	Temperature	2/21/23 12:08	19.54	C
APCO-GS-CCB-MW-5	TURB	Turbidity	2/21/23 12:08	6.05	NTU
APCO-GS-CCB-MW-5	COND	Conductivity	2/21/23 12:13	3339.93	uS/cm
APCO-GS-CCB-MW-5	DO	DO	2/21/23 12:13	0.81	mg/L
APCO-GS-CCB-MW-5	DTW	Depth to Water Detail	2/21/23 12:13	126.04	ft
APCO-GS-CCB-MW-5	ORP	Oxidation Reduction Potention	2/21/23 12:13	-8.77	mv
APCO-GS-CCB-MW-5	PH	pH	2/21/23 12:13	6.49	SU
APCO-GS-CCB-MW-5	TEMP	Temperature	2/21/23 12:13	19.77	C
APCO-GS-CCB-MW-5	TURB	Turbidity	2/21/23 12:13	5.69	NTU
APCO-GS-CCB-MW-5	COND	Conductivity	2/21/23 12:18	3355.12	uS/cm
APCO-GS-CCB-MW-5	DO	DO	2/21/23 12:18	0.79	mg/L
APCO-GS-CCB-MW-5	DTW	Depth to Water Detail	2/21/23 12:18	126.04	ft
APCO-GS-CCB-MW-5	ORP	Oxidation Reduction Potention	2/21/23 12:18	-7.67	mv
APCO-GS-CCB-MW-5	PH	pH	2/21/23 12:18	6.5	SU
APCO-GS-CCB-MW-5	SULFIDE	Sulfide	2/21/23 12:18	0	mg/L
APCO-GS-CCB-MW-5	TEMP	Temperature	2/21/23 12:18	19.77	C
APCO-GS-CCB-MW-5	TURB	Turbidity	2/21/23 12:18	4.48	NTU
APCO-GS-CCB-MW-6	COND	Conductivity	2/22/23 13:00	2846.88	uS/cm
APCO-GS-CCB-MW-6	DO	DO	2/22/23 13:00	0.39	mg/L
APCO-GS-CCB-MW-6	DTW	Depth to Water Detail	2/22/23 13:00	95.49	ft
APCO-GS-CCB-MW-6	ORP	Oxidation Reduction Potention	2/22/23 13:00	178.79	mv
APCO-GS-CCB-MW-6	PH	pH	2/22/23 13:00	4.96	SU
APCO-GS-CCB-MW-6	TEMP	Temperature	2/22/23 13:00	21.25	C
APCO-GS-CCB-MW-6	TURB	Turbidity	2/22/23 13:00	11.2	NTU
APCO-GS-CCB-MW-6	COND	Conductivity	2/22/23 13:05	2826.95	uS/cm
APCO-GS-CCB-MW-6	DO	DO	2/22/23 13:05	0.37	mg/L
APCO-GS-CCB-MW-6	DTW	Depth to Water Detail	2/22/23 13:05	95.49	ft
APCO-GS-CCB-MW-6	ORP	Oxidation Reduction Potention	2/22/23 13:05	189.2	mv
APCO-GS-CCB-MW-6	PH	pH	2/22/23 13:05	4.96	SU
APCO-GS-CCB-MW-6	TEMP	Temperature	2/22/23 13:05	21.34	C
APCO-GS-CCB-MW-6	TURB	Turbidity	2/22/23 13:05	9.17	NTU
APCO-GS-CCB-MW-6	COND	Conductivity	2/22/23 13:10	2800.25	uS/cm
APCO-GS-CCB-MW-6	DO	DO	2/22/23 13:10	0.46	mg/L
APCO-GS-CCB-MW-6	DTW	Depth to Water Detail	2/22/23 13:10	95.49	ft
APCO-GS-CCB-MW-6	ORP	Oxidation Reduction Potention	2/22/23 13:10	191.22	mv
APCO-GS-CCB-MW-6	PH	pH	2/22/23 13:10	4.98	SU
APCO-GS-CCB-MW-6	TEMP	Temperature	2/22/23 13:10	21.4	C
APCO-GS-CCB-MW-6	TURB	Turbidity	2/22/23 13:10	6.72	NTU
APCO-GS-CCB-MW-6	COND	Conductivity	2/22/23 13:15	2795.15	uS/cm
APCO-GS-CCB-MW-6	DO	DO	2/22/23 13:15	0.45	mg/L
APCO-GS-CCB-MW-6	DTW	Depth to Water Detail	2/22/23 13:15	95.49	ft
APCO-GS-CCB-MW-6	ORP	Oxidation Reduction Potention	2/22/23 13:15	195.75	mv
APCO-GS-CCB-MW-6	PH	pH	2/22/23 13:15	4.98	SU
APCO-GS-CCB-MW-6	SULFIDE	Sulfide	2/22/23 13:15	0	mg/L
APCO-GS-CCB-MW-6	TEMP	Temperature	2/22/23 13:15	21.32	C
APCO-GS-CCB-MW-6	TURB	Turbidity	2/22/23 13:15	6.33	NTU
APCO-GS-CCB-MW-7	COND	Conductivity	2/21/23 14:03	2672.87	uS/cm
APCO-GS-CCB-MW-7	DO	DO	2/21/23 14:03		mg/L
APCO-GS-CCB-MW-7	DTW	Depth to Water Detail	2/21/23 14:03	57.08	ft
APCO-GS-CCB-MW-7	ORP	Oxidation Reduction Potention	2/21/23 14:03	-9.2	mv
APCO-GS-CCB-MW-7	PH	pH	2/21/23 14:03	6.66	SU
APCO-GS-CCB-MW-7	TEMP	Temperature	2/21/23 14:03	19.19	C
APCO-GS-CCB-MW-7	TURB	Turbidity	2/21/23 14:03	1.55	NTU
APCO-GS-CCB-MW-7	COND	Conductivity	2/21/23 14:08	2646.76	uS/cm
APCO-GS-CCB-MW-7	DO	DO	2/21/23 14:08	0.96	mg/L
APCO-GS-CCB-MW-7	DTW	Depth to Water Detail	2/21/23 14:08	57.08	ft
APCO-GS-CCB-MW-7	ORP	Oxidation Reduction Potention	2/21/23 14:08	-8.58	mv
APCO-GS-CCB-MW-7	PH	pH	2/21/23 14:08	6.69	SU
APCO-GS-CCB-MW-7	TEMP	Temperature	2/21/23 14:08	19.16	C
APCO-GS-CCB-MW-7	TURB	Turbidity	2/21/23 14:08	0.79	NTU
APCO-GS-CCB-MW-7	COND	Conductivity	2/21/23 14:13	2616.13	uS/cm
APCO-GS-CCB-MW-7	DO	DO	2/21/23 14:13	0.9	mg/L
APCO-GS-CCB-MW-7	DTW	Depth to Water Detail	2/21/23 14:13	57.08	ft

APCO-GS-CCB-MW-7	ORP	Oxidation Reduction Potention	2/21/23 14:13	-9.09	mv
APCO-GS-CCB-MW-7	PH	pH	2/21/23 14:13	6.71	SU
APCO-GS-CCB-MW-7	TEMP	Temperature	2/21/23 14:13	19.15	C
APCO-GS-CCB-MW-7	TURB	Turbidity	2/21/23 14:13	0.65	NTU
APCO-GS-CCB-MW-7	COND	Conductivity	2/21/23 14:18	2594.5	uS/cm
APCO-GS-CCB-MW-7	DO	DO	2/21/23 14:18	0.87	mg/L
APCO-GS-CCB-MW-7	DTW	Depth to Water Detail	2/21/23 14:18	57.08	ft
APCO-GS-CCB-MW-7	ORP	Oxidation Reduction Potention	2/21/23 14:18	-7.92	mv
APCO-GS-CCB-MW-7	PH	pH	2/21/23 14:18	6.72	SU
APCO-GS-CCB-MW-7	TEMP	Temperature	2/21/23 14:18	19.16	C
APCO-GS-CCB-MW-7	TURB	Turbidity	2/21/23 14:18	0.78	NTU
APCO-GS-CCB-MW-7	COND	Conductivity	2/21/23 14:23	2577.99	uS/cm
APCO-GS-CCB-MW-7	DO	DO	2/21/23 14:23	0.94	mg/L
APCO-GS-CCB-MW-7	DTW	Depth to Water Detail	2/21/23 14:23	57.08	ft
APCO-GS-CCB-MW-7	ORP	Oxidation Reduction Potention	2/21/23 14:23	-6.78	mv
APCO-GS-CCB-MW-7	PH	pH	2/21/23 14:23	6.72	SU
APCO-GS-CCB-MW-7	SULFIDE	Sulfide	2/21/23 14:23	0	mg/L
APCO-GS-CCB-MW-7	TEMP	Temperature	2/21/23 14:23	19.16	C
APCO-GS-CCB-MW-7	TURB	Turbidity	2/21/23 14:23	0.53	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 14:55	2668.1	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 14:55	3.36	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 14:55	64.74	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 14:55	17.12	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 14:55	6.82	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 14:55	20.58	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 14:55	4.28	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:00	2702.28	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:00	1.06	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:00	64.76	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:00	10.74	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:00	6.77	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:00	21.12	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:00	19.9	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:05	2696.62	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:05	0.87	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:05	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:05	7.55	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:05	6.76	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:05	20.93	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:05	23.5	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:10	2696.47	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:10	0.69	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:10	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:10	4.9	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:10	6.76	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:10	20.71	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:10	34.1	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:15	2722.17	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:15	0.77	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:15	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:15	6.47	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:15	6.75	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:15	20.55	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:15	28.7	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:20	2722.02	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:20	0.54	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:20	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:20	5.72	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:20	6.75	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:20	20.34	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:20	20.6	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:25	2723.67	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:25	0.39	mg/L

APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:25	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:25	4.3	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:25	6.75	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:25	20.32	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:25	15.5	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:30	2724.42	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:30	0.34	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:30	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:30	3.53	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:30	6.75	SU
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:30	20.24	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:30	11.4	NTU
APCO-GS-CCB-MW-8	COND	Conductivity	2/21/23 15:35	2722.64	uS/cm
APCO-GS-CCB-MW-8	DO	DO	2/21/23 15:35	0.32	mg/L
APCO-GS-CCB-MW-8	DTW	Depth to Water Detail	2/21/23 15:35	64.8	ft
APCO-GS-CCB-MW-8	ORP	Oxidation Reduction Potention	2/21/23 15:35	1.47	mv
APCO-GS-CCB-MW-8	PH	pH	2/21/23 15:35	6.75	SU
APCO-GS-CCB-MW-8	SULFIDE	Sulfide	2/21/23 15:35	0	mg/L
APCO-GS-CCB-MW-8	TEMP	Temperature	2/21/23 15:35	20.26	C
APCO-GS-CCB-MW-8	TURB	Turbidity	2/21/23 15:35	7.56	NTU
APCO-GS-CCB-MW-10	COND	Conductivity	2/22/23 14:07	1390.68	uS/cm
APCO-GS-CCB-MW-10	DO	DO	2/22/23 14:07	4.43	mg/L
APCO-GS-CCB-MW-10	DTW	Depth to Water Detail	2/22/23 14:07	87.36	ft
APCO-GS-CCB-MW-10	ORP	Oxidation Reduction Potention	2/22/23 14:07	30.85	mv
APCO-GS-CCB-MW-10	PH	pH	2/22/23 14:07	6.74	SU
APCO-GS-CCB-MW-10	TEMP	Temperature	2/22/23 14:07	21.43	C
APCO-GS-CCB-MW-10	TURB	Turbidity	2/22/23 14:07	3.58	NTU
APCO-GS-CCB-MW-10	COND	Conductivity	2/22/23 14:12	1342.43	uS/cm
APCO-GS-CCB-MW-10	DO	DO	2/22/23 14:12	1.24	mg/L
APCO-GS-CCB-MW-10	DTW	Depth to Water Detail	2/22/23 14:12	87.72	ft
APCO-GS-CCB-MW-10	ORP	Oxidation Reduction Potention	2/22/23 14:12	10.55	mv
APCO-GS-CCB-MW-10	PH	pH	2/22/23 14:12	6.65	SU
APCO-GS-CCB-MW-10	TEMP	Temperature	2/22/23 14:12	21.44	C
APCO-GS-CCB-MW-10	TURB	Turbidity	2/22/23 14:12	5.84	NTU
APCO-GS-CCB-MW-10	COND	Conductivity	2/22/23 14:17	1321.62	uS/cm
APCO-GS-CCB-MW-10	DO	DO	2/22/23 14:17	0.8	mg/L
APCO-GS-CCB-MW-10	DTW	Depth to Water Detail	2/22/23 14:17	87.96	ft
APCO-GS-CCB-MW-10	ORP	Oxidation Reduction Potention	2/22/23 14:17	4.71	mv
APCO-GS-CCB-MW-10	PH	pH	2/22/23 14:17	6.65	SU
APCO-GS-CCB-MW-10	TEMP	Temperature	2/22/23 14:17	21.03	C
APCO-GS-CCB-MW-10	TURB	Turbidity	2/22/23 14:17	4.84	NTU
APCO-GS-CCB-MW-10	COND	Conductivity	2/22/23 14:22	1322.16	uS/cm
APCO-GS-CCB-MW-10	DO	DO	2/22/23 14:22	0.68	mg/L
APCO-GS-CCB-MW-10	DTW	Depth to Water Detail	2/22/23 14:22	88.08	ft
APCO-GS-CCB-MW-10	ORP	Oxidation Reduction Potention	2/22/23 14:22	1.64	mv
APCO-GS-CCB-MW-10	PH	pH	2/22/23 14:22	6.66	SU
APCO-GS-CCB-MW-10	TEMP	Temperature	2/22/23 14:22	21.36	C
APCO-GS-CCB-MW-10	TURB	Turbidity	2/22/23 14:22	4	NTU
APCO-GS-CCB-MW-10	COND	Conductivity	2/22/23 14:27	1326.24	uS/cm
APCO-GS-CCB-MW-10	DO	DO	2/22/23 14:27	0.68	mg/L
APCO-GS-CCB-MW-10	DTW	Depth to Water Detail	2/22/23 14:27	88.12	ft
APCO-GS-CCB-MW-10	ORP	Oxidation Reduction Potention	2/22/23 14:27	1.09	mv
APCO-GS-CCB-MW-10	PH	pH	2/22/23 14:27	6.67	SU
APCO-GS-CCB-MW-10	SULFIDE	Sulfide	2/22/23 14:27	0	mg/L
APCO-GS-CCB-MW-10	TEMP	Temperature	2/22/23 14:27	21.46	C
APCO-GS-CCB-MW-10	TURB	Turbidity	2/22/23 14:27	3.07	NTU

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

Analytical Report

Alabama Power

Sample Group : WMWGORLF_1399

Project/Site : Gorgas Landfill
Parrish, AL 35580

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

March 22, 2023

Dear Dustin Brooks,

Enclosed are the analytical results for sample(s) received by the laboratory on February 23, 2023.
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, 2023

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: 2023.03.22 15:42:28 -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 the author of this document
Location:
Date: 2023-03-24 07:35-05:00

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

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748240	WMWGORLF_1399
BD04070	748240	WMWGORLF_1399
BD04071	748240	WMWGORLF_1399
BD04072	748240	WMWGORLF_1399
BD04073	748240	WMWGORLF_1399
BD04074	748240	WMWGORLF_1399
BD04075	748240	WMWGORLF_1399
BD04076	748240	WMWGORLF_1399
BD04077	748240	WMWGORLF_1399
BD04078	748240	WMWGORLF_1399
BD04079	748241	WMWGORLF_1399
BD04080	748241	WMWGORLF_1399
BD04081	748241	WMWGORLF_1399
BD04082	748241	WMWGORLF_1399
BD04083	748241	WMWGORLF_1399
BD04084	748241	WMWGORLF_1399
BD04085	748241	WMWGORLF_1399
BD04086	748241	WMWGORLF_1399
BD04087	748241	WMWGORLF_1399
BD04088	748241	WMWGORLF_1399
BD04089	748242	WMWGORLF_1399

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:
    - BD04078 Calcium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04088 & BD04089 Calcium, Iron, Magnesium and Sodium MS/MSD spike levels were less than 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 sample was diluted due to the analyzed sample concentration being greater than the high standard of the calibration curve:

Sample ID	Analyte	Dilution Factor
BD04069	Calcium, Magnesium, Sodium	101.5
BD04070	Calcium, Magnesium	10.15
BD04071	Calcium, Magnesium	10.15
BD04072	Calcium, Iron, Magnesium, Sodium	10.15
BD04074	Calcium, Iron, Magnesium, Sodium	10.15
BD04075	Calcium, Magnesium	10.15
BD04076	Calcium, Magnesium	10.15
BD04077	Calcium, Iron, Magnesium	10.15
BD04078	Calcium, Magnesium	10.15

BD04079	Calcium, Magnesium	10.15
BD04081	Calcium, Iron, Magnesium	101.5
BD04082	Calcium, Magnesium	10.15
BD04083	Calcium, Magnesium	101.5
BD04084	Calcium, Magnesium	101.5
BD04085	Calcium, Iron, Magnesium, Sodium	10.15
BD04087	Calcium, Magnesium, Sodium	10.15
BD04088	Calcium, Iron, Magnesium, Sodium	10.15
BD04089	Calcium, Iron, Magnesium, Sodium	101.5

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

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748173	WMWGORLF_1399
BD04070	748173	WMWGORLF_1399
BD04071	748173	WMWGORLF_1399
BD04072	748173	WMWGORLF_1399
BD04074	748173	WMWGORLF_1399
BD04075	748173	WMWGORLF_1399
BD04076	748173	WMWGORLF_1399
BD04077	748173	WMWGORLF_1399
BD04078	748173	WMWGORLF_1399
BD04079	748173	WMWGORLF_1399
BD04081	748174	WMWGORLF_1399
BD04082	748174	WMWGORLF_1399
BD04083	748174	WMWGORLF_1399
BD04084	748174	WMWGORLF_1399
BD04085	748174	WMWGORLF_1399
BD04087	748174	WMWGORLF_1399
BD04088	748174	WMWGORLF_1399
BD04089	748174	WMWGORLF_1399

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:
    - BD04079 Calcium and Magnesium MS/MSD spike levels were less than 30% of the sample concentrations.
    - BD04089 Calcium, Iron, Magnesium and Sodium MS/MSD spike levels were less than 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
BD04069	Calcium, Magnesium, Sodium	101.5
BD04070	Calcium, Magnesium	10.15
BD04071	Calcium, Magnesium	10.15
BD04072	Calcium, Magnesium, Sodium	10.15
BD04074	Calcium, Magnesium, Sodium	10.15
BD04075	Calcium, Magnesium	10.15
BD04076	Calcium, Magnesium	10.15
BD04077	Calcium, Iron, Magnesium	10.15
BD04078	Calcium, Magnesium	10.15
BD04079	Calcium, Magnesium	10.15
BD04081	Calcium, Iron, Magnesium	101.5
BD04082	Calcium, Magnesium	10.15
BD04083	Calcium, Magnesium	101.5
BD04084	Calcium, Magnesium	101.5

BD04085	Calcium, Iron, Magnesium, Sodium	10.15
BD04087	Calcium, Magnesium, Sodium	10.15
BD04088	Calcium, Magnesium, Sodium	10.15
BD04089	Calcium, Iron, Magnesium, Sodium	101.5

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

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748909	WMWGORLF_1399
BD04070	748909	WMWGORLF_1399
BD04071	748909	WMWGORLF_1399
BD04072	748909	WMWGORLF_1399
BD04073	748909	WMWGORLF_1399
BD04074	748909, 750305	WMWGORLF_1399
BD04075	748909	WMWGORLF_1399
BD04076	748909	WMWGORLF_1399
BD04077	748909	WMWGORLF_1399
BD04078	748909	WMWGORLF_1399
BD04079	748910	WMWGORLF_1399
BD04080	748910	WMWGORLF_1399
BD04081	748910	WMWGORLF_1399
BD04082	748910	WMWGORLF_1399
BD04083	748910	WMWGORLF_1399
BD04084	748910	WMWGORLF_1399
BD04085	748910	WMWGORLF_1399
BD04086	748910	WMWGORLF_1399
BD04087	748910	WMWGORLF_1399
BD04088	748910	WMWGORLF_1399
BD04089	748911	WMWGORLF_1399

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.

Revision 5

- 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:
    - BD04078 & BD04089 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
- 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
BD04070	Manganese	5.075
BD04072	Manganese	92.365
BD04075	Manganese	5.075
BD04076	Manganese	5.075
BD04077	Manganese	10.15
BD04078	Manganese	5.075
BD04079	Manganese	5.075
BD04081	Manganese	92.365
BD04083	Manganese	5.075

BD04084	Manganese	5.075
BD04087	Manganese	5.075
BD04089	Manganese	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

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748983	WMWGORLF_1399
BD04070	748983	WMWGORLF_1399
BD04071	748983	WMWGORLF_1399
BD04072	748983	WMWGORLF_1399
BD04074	748983, 750302	WMWGORLF_1399
BD04075	748983	WMWGORLF_1399
BD04076	748983	WMWGORLF_1399
BD04077	748983	WMWGORLF_1399
BD04078	748983	WMWGORLF_1399
BD04079	748983	WMWGORLF_1399
BD04081	748984	WMWGORLF_1399
BD04082	748984	WMWGORLF_1399
BD04083	748984	WMWGORLF_1399
BD04084	748984	WMWGORLF_1399
BD04085	748984	WMWGORLF_1399
BD04087	748984	WMWGORLF_1399
BD04088	748984	WMWGORLF_1399
BD04089	748984	WMWGORLF_1399

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 except for the following:
    - BD04079 & BD04089 Manganese MS/MSD spike levels were less than 30% of the sample concentrations.
- 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
BD04070	Manganese	5.075
BD04072	Manganese	92.365
BD04075	Manganese	5.075
BD04076	Manganese	5.075
BD04077	Manganese	10.15
BD04078	Manganese	5.075
BD04079	Manganese	5.075
BD04081	Manganese	92.365
BD04083	Manganese	5.075
BD04084	Manganese	5.075
BD04087	Manganese	5.075
BD04089	Manganese	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

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748528	WMWGORLF_1399
BD04070	748529	WMWGORLF_1399
BD04071	748529	WMWGORLF_1399
BD04072	748529	WMWGORLF_1399
BD04073	748529	WMWGORLF_1399
BD04074	748529	WMWGORLF_1399
BD04075	748529	WMWGORLF_1399
BD04076	748529	WMWGORLF_1399
BD04077	748529	WMWGORLF_1399
BD04078	748529	WMWGORLF_1399
BD04079	748529	WMWGORLF_1399
BD04080	748530	WMWGORLF_1399
BD04081	748530	WMWGORLF_1399
BD04082	748530	WMWGORLF_1399
BD04083	748530	WMWGORLF_1399
BD04084	748530	WMWGORLF_1399
BD04085	748530	WMWGORLF_1399
BD04086	748530	WMWGORLF_1399
BD04087	748530	WMWGORLF_1399
BD04088	748530	WMWGORLF_1399
BD04089	748530	WMWGORLF_1399

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 factor.

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

Case Narrative

Alabama Power

Total Dissolved Solids

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748199	WMWGORLF_1399
BD04070	748199	WMWGORLF_1399
BD04071	748199	WMWGORLF_1399
BD04072	748199	WMWGORLF_1399
BD04073	748199	WMWGORLF_1399
BD04074	748199	WMWGORLF_1399
BD04075	748199	WMWGORLF_1399
BD04076	748199	WMWGORLF_1399
BD04077	748199	WMWGORLF_1399
BD04078	748199	WMWGORLF_1399
BD04079	748200	WMWGORLF_1399
BD04080	748200	WMWGORLF_1399
BD04081	748200	WMWGORLF_1399
BD04082	748200	WMWGORLF_1399
BD04083	748200	WMWGORLF_1399
BD04084	748200	WMWGORLF_1399
BD04085	748200	WMWGORLF_1399
BD04086	748200	WMWGORLF_1399
BD04087	748200	WMWGORLF_1399
BD04088	748200	WMWGORLF_1399
BD04089	748340	WMWGORLF_1399

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%.

Revision 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:
    - BD04073
    - BD04080
    - BD08086

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

Case Narrative

Alabama Power

Alkalinity

Gorgas Landfill

WMWGORLF_1399

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
BD04069	749151, 749152, 749153	WMWGORLF_1399
BD04070	749151, 749152, 749153	WMWGORLF_1399
BD04071	749151, 749152, 749153	WMWGORLF_1399
BD04072	749216, 749217, 749218	WMWGORLF_1399
BD04074	749216, 749217, 749218	WMWGORLF_1399
BD04075	749151, 749152, 749153	WMWGORLF_1399
BD04076	749151, 749152, 749153	WMWGORLF_1399
BD04077	749151, 749152, 749153	WMWGORLF_1399
BD04078	749151, 749152, 749153	WMWGORLF_1399
BD04079	749151, 749152, 749153	WMWGORLF_1399
BD04081	749151, 749152, 749153	WMWGORLF_1399
BD04082	749151, 749152, 749153	WMWGORLF_1399
BD04083	749216, 749217, 749218	WMWGORLF_1399
BD04084	749216, 749217, 749218	WMWGORLF_1399
BD04085	749216, 749217, 749218	WMWGORLF_1399
BD04087	749216, 749217, 749218	WMWGORLF_1399
BD04088	749216, 749217, 749218	WMWGORLF_1399
BD04089	749216, 749217, 749218	WMWGORLF_1399

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.

Revision 5

7. The following samples had pH>10 and/or TDS>500mg/L. Therefore, the calculations for carbonate and bicarbonate are estimates:
    - BD04069
    - BD04070
    - BD04071
    - BD04072
    - BD04074
    - BD04075
    - BD04076
    - BD04077
    - BD04078
    - BD04079
    - BD04081
    - BD04082
    - BD04083
    - BD04084
    - BD04085
    - BD04087
    - BD04088
    - BD04089

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

Case Narrative

Alabama Power

Anions

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748522, 748557, 748697	WMWGORLF_1399
BD04070	748522, 748557, 748697	WMWGORLF_1399
BD04071	748522, 748557, 748697	WMWGORLF_1399
BD04072	748522, 748557, 748697	WMWGORLF_1399
BD04073	748522, 748557, 748697	WMWGORLF_1399
BD04074	748522, 748557, 748697	WMWGORLF_1399
BD04075	748522, 748557, 748697	WMWGORLF_1399
BD04076	748522, 748557, 748697	WMWGORLF_1399
BD04077	748522, 748557, 748697	WMWGORLF_1399
BD04078	748522, 748557, 748697	WMWGORLF_1399
BD04079	748523, 748558, 748698	WMWGORLF_1399
BD04080	748523, 748558, 748698	WMWGORLF_1399
BD04081	748523, 748558, 748698	WMWGORLF_1399
BD04082	748523, 748558, 748698	WMWGORLF_1399
BD04083	748523, 748558, 748698	WMWGORLF_1399
BD04084	748523, 748558, 748698	WMWGORLF_1399
BD04085	748523, 748558, 748698	WMWGORLF_1399
BD04086	748523, 748558, 748698	WMWGORLF_1399
BD04087	748523, 748558, 748698	WMWGORLF_1399
BD04088	748523, 748558, 748698	WMWGORLF_1399
BD04089	748524, 748559, 748699	WMWGORLF_1399

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) was analyzed, and all criteria were met.

Revision 5

- 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
BD04069	Sulfate	80
BD04070	Sulfate	50
BD04071	Sulfate	50
BD04072	Sulfate	80
BD04074	Sulfate	32
BD04075	Sulfate	50
BD04076	Sulfate	50
BD04077	Sulfate	50
BD04078	Sulfate	80
BD04079	Sulfate	50
BD04081	Sulfate	80
BD04082	Sulfate	50
BD04083	Sulfate	64
BD04084	Sulfate	64
BD04085	Chloride, Sulfate	5, 50
BD04087	Chloride, Sulfate	4, 50
BD04088	Chloride, Sulfate	8, 80
BD04089	Sulfate	100

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

Revision 5

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

Case Narrative

Alabama Power

Nitrate-Nitrite

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748513	WMWGORLF_1399
BD04070	748513	WMWGORLF_1399
BD04071	748513	WMWGORLF_1399
BD04072	748513	WMWGORLF_1399
BD04073	748513	WMWGORLF_1399
BD04074	748513	WMWGORLF_1399
BD04075	748513	WMWGORLF_1399
BD04076	748513	WMWGORLF_1399
BD04077	748513	WMWGORLF_1399
BD04078	748513	WMWGORLF_1399
BD04079	748514	WMWGORLF_1399
BD04080	748514	WMWGORLF_1399
BD04081	748514	WMWGORLF_1399
BD04082	748514	WMWGORLF_1399
BD04083	748514	WMWGORLF_1399
BD04084	748514	WMWGORLF_1399
BD04085	748514	WMWGORLF_1399
BD04086	748514	WMWGORLF_1399
BD04087	748514	WMWGORLF_1399
BD04088	748514	WMWGORLF_1399
BD04089	748515	WMWGORLF_1399

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.

Revision 5

- 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, except for the following:
        - BD04089 Precision is outside of the specification limit.
    - A matrix spike was run and criteria for accuracy was met, except for the following:
        - BD04078 & BD04089 matrix spike recovery is outside of the specification limit.

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

Gorgas Landfill

WMWGORLF_1399

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
BD04069	748202	WMWGORLF_1399
BD04070	748202	WMWGORLF_1399
BD04071	748202	WMWGORLF_1399
BD04072	748202	WMWGORLF_1399
BD04073	748202	WMWGORLF_1399
BD04074	748202	WMWGORLF_1399
BD04075	748202	WMWGORLF_1399
BD04076	748202	WMWGORLF_1399
BD04077	748202	WMWGORLF_1399
BD04078	748202	WMWGORLF_1399
BD04079	748203	WMWGORLF_1399
BD04080	748203	WMWGORLF_1399
BD04081	748203	WMWGORLF_1399
BD04082	748203	WMWGORLF_1399
BD04083	748203	WMWGORLF_1399
BD04084	748203	WMWGORLF_1399
BD04085	748203	WMWGORLF_1399
BD04086	748203	WMWGORLF_1399
BD04087	748203	WMWGORLF_1399
BD04088	748203	WMWGORLF_1399
BD04089	748204	WMWGORLF_1399

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.

Revision 5

- 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, except for the following:
    - BD04078 matrix spike and/or matrix spike duplicate recovery are outside of the specification limit.
- 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: Gorgas Landfill - MW-5

Location Code: WMWGORLF
Collected: 2/21/23 12:22
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04069

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/27/23 15:03		1.015	0.0315	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 13:52		101.5	367	mg/L	7.0035	40.6	
* Iron, Total	2/24/23 13:19	2/27/23 15:03		1.015	3.88	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:03		1.015	0.104	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 12:48		101.5	334	mg/L	2.1315	40.6	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:03		1	16.3	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:03		1.015	7.63	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 13:52		101.5	47.7	mg/L	3.045	40.6	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:19		1.015	0.0306	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:07		101.5	355	mg/L	7.0035	40.6	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:19		1.015	2.46	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:19		1.015	0.0939	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:07		101.5	359	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:19		1	16.0	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:19		1.015	7.49	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 13:07		101.5	48.8	mg/L	3.045	40.6	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 16:45		1.015	0.000306	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 16:45		1.015	0.0121	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 16:45		1.015	0.000910	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:45		1.015	0.394	mg/L	0.000152	0.001015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:45		1.015	0.000945	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 16:45		1.015	6.20	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: 3/22/2023
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: Gorgas Landfill - MW-5

Location Code: WMWGORLF
Collected: 2/21/23 12:22
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04069

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 16:45		1.015	0.00124	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 16:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	0.000198	mg/L	0.000081	0.000203	J
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	0.0107	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 09:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	0.000976	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	0.322	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	0.000937	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	5.74	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	0.00172	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:05		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 01:36		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:55	2/24/23 10:55		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	260	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	3310	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	260	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 18:05	2/23/23 18:05		1	1.17	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: 3/22/2023
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: Gorgas Landfill - MW-5

Location Code: WMWGORLF
Collected: 2/21/23 12:22
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04069

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:05	2/24/23 14:05		1	5.25	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:31	2/27/23 12:31		1	0.319	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:52	3/1/23 13:52		80	2210	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/21/23 12:18	2/21/23 12:18			3355.12	uS/cm			FA
pH	2/21/23 12:18	2/21/23 12:18			6.50	SU			FA
Temperature	2/21/23 12:18	2/21/23 12:18			19.77	C			FA
Turbidity	2/21/23 12:18	2/21/23 12:18			4.48	NTU			FA
Sulfide	2/21/23 12:18	2/21/23 12:18			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 12:22
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-5

Laboratory ID Number: BD04069

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/21/23 12:22
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-5

Laboratory ID Number: BD04069

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04069	Mercury, Total by CVAA	mg/L	1.000E-05	0.000500	0.004	0.00319	0.00370	0.00393	0.00340 to 0.00460	79.8	70.0 to 130	14.8	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 12:22
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-5

Laboratory ID Number: BD04069

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	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: Gorgas Landfill - MW-7

Location Code: WMWGORLF
Collected: 2/21/23 14:25
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04070

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/27/23 15:07		1.015	0.0645	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 13:56		10.15	286	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/27/23 15:07		1.015	2.07	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:07		1.015	0.0932	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 12:51		10.15	262	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:07		1	10.4	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:07		1.015	4.88	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/27/23 15:07		1.015	38.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:22		1.015	0.0664	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:10		10.15	299	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:22		1.015	2.15	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:22		1.015	0.0892	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:10		10.15	281	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:22		1	10.7	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:22		1.015	5.01	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:22		1.015	37.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 16:48		1.015	0.00153	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 16:48		1.015	0.0141	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 16:48		1.015	0.00430	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 18:52		5.075	2.10	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:48		1.015	0.00103	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 16:48		1.015	6.61	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: 3/22/2023
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: Gorgas Landfill - MW-7

Location Code: WMWGORLF
Collected: 2/21/23 14:25
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04070

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 16:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	0.00162	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	0.0131	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 09:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	0.00381	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:27		5.075	2.10	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	0.000885	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	6.20	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:04		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:56	2/24/23 10:56		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	296	mg CaCO3/L		0.10	
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2220	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	296	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 18:23	2/23/23 18:23		1	1.91	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: 3/22/2023
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: Gorgas Landfill - MW-7

Location Code: WMWGORLF
Collected: 2/21/23 14:25
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04070

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:06	2/24/23 14:06		1	6.12	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:32	2/27/23 12:32		1	0.216	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:53	3/1/23 13:53		50	1450	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/21/23 14:23	2/21/23 14:23			2577.99	uS/cm			FA
pH	2/21/23 14:23	2/21/23 14:23			6.72	SU			FA
Temperature	2/21/23 14:23	2/21/23 14:23			19.16	C			FA
Turbidity	2/21/23 14:23	2/21/23 14:23			0.53	NTU			FA
Sulfide	2/21/23 14:23	2/21/23 14:23			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 14:25
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-7

Laboratory ID Number: BD04070

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/21/23 14:25
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-7

Laboratory ID Number: BD04070

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 14:25
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-7

Laboratory ID Number: BD04070

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-8

Location Code: WMWGORLF
Collected: 2/21/23 15:40
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04071

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/27/23 15:10		1.015	0.0609	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 13:59		10.15	327	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/27/23 15:10		1.015	2.45	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:10		1.015	0.120	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 12:54		10.15	293	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:10		1	11.1	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:10		1.015	5.21	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/27/23 15:10		1.015	36.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:25		1.015	0.0617	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:13		10.15	317	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:25		1.015	1.37	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:25		1.015	0.119	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:13		10.15	321	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:25		1	11.2	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:25		1.015	5.25	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:25		1.015	36.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 16:52		1.015	0.00119	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 16:52		1.015	0.0148	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 16:52		1.015	0.00682	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 16:52		1.015	0.0000877	mg/L	0.000068	0.000203	J
* Manganese, Total	2/24/23 13:19	2/27/23 16:52		1.015	0.933	mg/L	0.000152	0.001015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:52		1.015	0.000338	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 16:52		1.015	7.95	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: 3/22/2023
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: Gorgas Landfill - MW-8

Location Code: WMWGORLF
Collected: 2/21/23 15:40
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04071

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 16:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	0.000567	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	0.0126	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 09:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	0.00585	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	0.844	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	0.000582	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	7.39	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:08		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 10:58	2/24/23 10:58		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	349	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2370	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	349	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 18:41	2/23/23 18:41		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: 3/22/2023
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: Gorgas Landfill - MW-8

Location Code: WMWGORLF
Collected: 2/21/23 15:40
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04071

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:07	2/24/23 14:07		1	4.86	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:33	2/27/23 12:33		1	0.212	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:54	3/1/23 13:54		50	1510	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/21/23 15:35	2/21/23 15:35			2722.64	uS/cm			FA
pH	2/21/23 15:35	2/21/23 15:35			6.75	SU			FA
Temperature	2/21/23 15:35	2/21/23 15:35			20.26	C			FA
Turbidity	2/21/23 15:35	2/21/23 15:35			7.56	NTU			FA
Sulfide	2/21/23 15:35	2/21/23 15:35			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 15:40
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-8

Laboratory ID Number: BD04071

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/21/23 15:40
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-8

Laboratory ID Number: BD04071

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 15:40
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-8

Laboratory ID Number: BD04071

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-6

Location Code: WMWGORLF
Collected: 2/22/23 13:20
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04072

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/27/23 15:13		1.015	0.0356	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:02		10.15	250	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 14:02		10.15	6.16	mg/L	0.08120	0.406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:13		1.015	0.0329	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 12:58		10.15	302	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:13		1	20.8	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:13		1.015	9.72	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 14:02		10.15	45.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:28		1.015	0.0381	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:16		10.15	266	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:28		1.015	3.60	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:28		1.015	0.0325	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:16		10.15	354	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:28		1	20.9	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:28		1.015	9.76	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 13:16		10.15	49.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 16:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.377	mg/L	0.006090	0.05075	
* Arsenic, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.00337	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.0136	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.00123	mg/L	0.000406	0.001015	
* Cadmium, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.00192	mg/L	0.000068	0.000203	
* Chromium, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.000301	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.567	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.000457	mg/L	0.000068	0.000203	
* Manganese, Total	2/24/23 13:19	2/27/23 18:55		92.365	55.8	mg/L	0.013855	0.092365	
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:55		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 16:55		1.015	6.48	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: 3/22/2023
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: Gorgas Landfill - MW-6

Location Code: WMWGORLF
Collected: 2/22/23 13:20
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04072

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.00190	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 16:55		1.015	0.000143	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.311	mg/L	0.006090	0.05075	
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.00190	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.0118	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 09:55		1.015	0.00128	mg/L	0.000406	0.001015	
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.00194	mg/L	0.000068	0.000203	
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.487	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.000115	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:31		92.365	51.6	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.000164	mg/L	0.000102	0.000203	J
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	5.86	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.00162	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:16		1.015	0.000138	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:11		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:00	2/24/23 11:00		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	32.6	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2790	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	32.6	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 19:00	2/23/23 19:00		1	2.24	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: 3/22/2023
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: Gorgas Landfill - MW-6

Location Code: WMWGORLF
Collected: 2/22/23 13:20
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04072

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:09	2/24/23 14:09		1	4.37	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:34	2/27/23 12:34		1	0.173	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:55	3/1/23 13:55		80	1870	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/23 13:15	2/22/23 13:15			2795.15	uS/cm			FA
pH	2/22/23 13:15	2/22/23 13:15			4.98	SU			FA
Temperature	2/22/23 13:15	2/22/23 13:15			21.32	C			FA
Turbidity	2/22/23 13:15	2/22/23 13:15			6.33	NTU			FA
Sulfide	2/22/23 13:15	2/22/23 13:15			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/22/23 13:20
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-6

Laboratory ID Number: BD04072

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/22/23 13:20
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-6

Laboratory ID Number: BD04072

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/22/23 13:20
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-6

Laboratory ID Number: BD04072

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	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: Gorgas Landfill Field Blank-2

Location Code: WMWGORLFFB
Collected: 2/22/23 14:10
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04073

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:16		1	Not Detected	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	2/24/23 13:19	2/27/23 15:16		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 16:59		1.015	0.00196	mg/L	0.000152	0.001015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 16:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:15		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:02	2/24/23 11:02		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 3/22/2023
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: Gorgas Landfill Field Blank-2

Location Code: WMWGORLFFB
Collected: 2/22/23 14:10
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04073

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 19:16	2/23/23 19:16		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:10	2/24/23 14:10		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:35	2/27/23 12:35		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:57	3/1/23 13:57		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 3/22/2023
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: WMWGORLFFB
Sample Date: 2/22/23 14:10
Customer ID:
Delivery Date: 2/23/23 11:07

Description:Gorgas Landfill Field Blank-2

Laboratory ID Number: BD04073

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0

Comments:

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORLFFB
Sample Date: 2/22/23 14:10
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill Field Blank-2

Laboratory ID Number: BD04073

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORLFFB
Sample Date: 2/22/23 14:10
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill Field Blank-2

Laboratory ID Number: BD04073

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	10.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Landfill - MW-10

Location Code: WMWGORLF
Collected: 2/22/23 14:30
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04074

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/27/23 15:19		1.015	0.122	mg/L	0.030000	0.1015	
* Calcium, Total	2/24/23 13:19	2/28/23 14:05		10.15	152	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 14:05		10.15	5.86	mg/L	0.08120	0.406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:19		1.015	0.149	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 13:01		10.15	69.1	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:19		1	11.5	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:19		1.015	5.38	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 14:05		10.15	93.1	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:32		1.015	0.140	mg/L	0.030000	0.1015	
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:19		10.15	163	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:32		1.015	1.94	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:32		1.015	0.148	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:19		10.15	82.2	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:32		1	12.3	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:32		1.015	5.76	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 13:19		10.15	85.4	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 17:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.310	mg/L	0.006090	0.05075	
* Arsenic, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.000692	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.0222	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.000498	mg/L	0.000406	0.001015	J
* Cadmium, Total	2/24/23 13:19	2/27/23 17:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.000277	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.00105	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.000155	mg/L	0.000068	0.000203	J
* Manganese, Total	3/16/23 12:06	3/16/23 12:43		1.015	0.673	mg/L	0.000152	0.001015	C
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.000111	mg/L	0.000102	0.000203	J
* Potassium, Total	2/24/23 13:19	2/27/23 17:02		1.015	4.64	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: 3/22/2023
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: Gorgas Landfill - MW-10

Location Code: WMWGORLF
Collected: 2/22/23 14:30
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04074

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:02		1.015	0.000611	mg/L	0.000508	0.001015	J
* Thallium, Total	2/24/23 13:19	2/27/23 17:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	0.0000835	mg/L	0.000081	0.000203	J
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	0.0191	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 09:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	0.00105	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	3/16/23 08:55	3/16/23 11:35		1.015	1.06	mg/L	0.000152	0.001015	C
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	0.000225	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	4.27	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:20		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:19		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:04	2/24/23 11:04		1	0.269	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	188	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	991	mg/L		75.8	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	188	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 19:29	2/23/23 19:29		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: 3/22/2023
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: Gorgas Landfill - MW-10

Location Code: WMWGORLF
Collected: 2/22/23 14:30
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04074

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:11	2/24/23 14:11		1	2.77	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:37	2/27/23 12:37		1	0.132	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:58	3/1/23 13:58		32	581	mg/L	19.2	64	
Analytical Method: Field Measurements	***Analyst: TJD***								
Conductivity	2/22/23 14:27	2/22/23 14:27			1326.24	uS/cm			FA
pH	2/22/23 14:27	2/22/23 14:27			6.67	SU			FA
Temperature	2/22/23 14:27	2/22/23 14:27			21.46	C			FA
Turbidity	2/22/23 14:27	2/22/23 14:27			3.07	NTU			FA
Sulfide	2/22/23 14:27	2/22/23 14:27			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/22/23 14:30
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-10

Laboratory ID Number: BD04074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/22/23 14:30
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-10

Laboratory ID Number: BD04074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04074	Manganese, Dissolved	mg/L	0.0000325	0.00033	0.100	1.13	1.13	0.101	0.0850 to 0.115	70.0	70.0 to 130	0.00	20.0
BD04074	Manganese, Total	mg/L	-0.0000089	0.00033	0.100	0.769	0.769	0.102	0.0850 to 0.115	96.0	70.0 to 130	0.00	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/22/23 14:30
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-10

Laboratory ID Number: BD04074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	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: Gorgas Landfill - MW-13

Location Code: WMWGORLF
Collected: 2/20/23 11:02
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04075

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/27/23 15:23		1.015	0.0511	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:08		10.15	191	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/27/23 15:23		1.015	0.0377	mg/L	0.008120	0.0406	J
* Lithium, Total	2/24/23 13:19	2/27/23 15:23		1.015	0.0158	mg/L	0.007105	0.01999956	J
* Magnesium, Total	2/24/23 13:19	3/2/23 13:04		10.15	225	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:23		1	8.62	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:23		1.015	4.03	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/27/23 15:23		1.015	30.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:35		1.015	0.0513	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:22		10.15	213	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:35		1.015	0.0345	mg/L	0.008120	0.0406	J
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:35		1.015	0.0152	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:22		10.15	259	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:35		1	8.67	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:35		1.015	4.05	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:35		1.015	29.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 17:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:06		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:06		1.015	0.000164	mg/L	0.000081	0.000203	J
* Barium, Total	2/24/23 13:19	2/27/23 17:06		1.015	0.0100	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:06		1.015	0.000210	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 17:06		1.015	0.00540	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 18:59		5.075	2.30	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:06		1.015	0.000340	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 17:06		1.015	7.61	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: 3/22/2023
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: Gorgas Landfill - MW-13

Location Code: WMWGORLF
Collected: 2/20/23 11:02
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04075

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:06		1.015	0.00148	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 17:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	0.00905	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	0.00475	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:34		5.075	2.35	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	0.00100	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	6.80	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	0.00176	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:24		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:23		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:06	2/24/23 11:06		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	233	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	1920	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	233	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 19:48	2/23/23 19:48		1	1.37	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: 3/22/2023
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: Gorgas Landfill - MW-13

Location Code: WMWGORLF
Collected: 2/20/23 11:02
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04075

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:12	2/24/23 14:12		1	1.63	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:38	2/27/23 12:38		1	0.243	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 13:59	3/1/23 13:59		50	1150	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/20/23 10:59	2/20/23 10:59			2211.86	uS/cm			FA
pH	2/20/23 10:59	2/20/23 10:59			6.58	SU			FA
Temperature	2/20/23 10:59	2/20/23 10:59			18.98	C			FA
Turbidity	2/20/23 10:59	2/20/23 10:59			1.6	NTU			FA
Sulfide	2/20/23 10:59	2/20/23 10:59			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 11:02
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-13

Laboratory ID Number: BD04075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/20/23 11:02
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-13

Laboratory ID Number: BD04075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 11:02
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-13

Laboratory ID Number: BD04075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	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: Gorgas Landfill - MW-14

Location Code: WMWGORLF
Collected: 2/20/23 12:02
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04076

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/27/23 15:26		1.015	0.0423	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:11		10.15	281	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/27/23 15:26		1.015	1.41	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:26		1.015	0.0308	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 13:07		10.15	333	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:26		1	11.4	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:26		1.015	5.34	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/27/23 15:26		1.015	24.0	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:38		1.015	0.0428	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:26		10.15	285	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:38		1.015	1.20	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:38		1.015	0.0307	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:26		10.15	334	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:38		1	11.6	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:38		1.015	5.42	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:38		1.015	24.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:09		1.015	0.00621	mg/L	0.006090	0.05075	J
* Arsenic, Total	2/24/23 13:19	2/27/23 17:09		1.015	0.000883	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:09		1.015	0.0113	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:09		1.015	0.00829	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 19:03		5.075	1.95	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:09		1.015	0.00444	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 17:09		1.015	8.02	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: 3/22/2023
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: Gorgas Landfill - MW-14

Location Code: WMWGORLF
Collected: 2/20/23 12:02
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04076

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	0.000639	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	0.0106	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	0.00732	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:38		5.075	1.89	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	0.00430	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	7.36	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:27		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:08	2/24/23 11:08		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	242	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2590	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	242	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 20:07	2/23/23 20:07		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: 3/22/2023
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: Gorgas Landfill - MW-14

Location Code: WMWGORLF
Collected: 2/20/23 12:02
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04076

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:13	2/24/23 14:13		1	2.04	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:39	2/27/23 12:39		1	0.226	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:00	3/1/23 14:00		50	1680	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/20/23 11:59	2/20/23 11:59			2825.50	uS/cm			FA
pH	2/20/23 11:59	2/20/23 11:59			6.45	SU			FA
Temperature	2/20/23 11:59	2/20/23 11:59			19.03	C			FA
Turbidity	2/20/23 11:59	2/20/23 11:59			2.26	NTU			FA
Sulfide	2/20/23 11:59	2/20/23 11:59			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 12:02
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-14

Laboratory ID Number: BD04076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/20/23 12:02
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-14

Laboratory ID Number: BD04076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 12:02
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-14

Laboratory ID Number: BD04076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-15

Location Code: WMWGORLF
Collected: 2/20/23 13:17
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04077

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/27/23 15:29		1.015	0.0396	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:14		10.15	232	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 14:14		10.15	13.8	mg/L	0.08120	0.406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:29		1.015	0.0510	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	3/2/23 13:10		10.15	236	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:29		1	18.6	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:29		1.015	8.70	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/27/23 15:29		1.015	22.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:41		1.015	0.0403	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:29		10.15	239	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 13:29		10.15	13.6	mg/L	0.08120	0.406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:41		1.015	0.0491	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:29		10.15	257	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:41		1	18.6	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:41		1.015	8.70	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:41		1.015	22.6	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:13		1.015	0.000217	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:13		1.015	0.0109	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:13		1.015	0.0533	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 19:06		10.15	9.37	mg/L	0.001522	0.01015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 17:13		1.015	5.32	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: 3/22/2023
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: Gorgas Landfill - MW-15

Location Code: WMWGORLF
Collected: 2/20/23 13:17
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04077

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:13		1.015	0.000915	mg/L	0.000508	0.001015	J
* Thallium, Total	2/24/23 13:19	2/27/23 17:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	0.000147	mg/L	0.000081	0.000203	J
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	0.00952	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:10		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	0.0459	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:41		10.15	9.18	mg/L	0.001522	0.01015	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	0.00141	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	4.79	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	0.000994	mg/L	0.000508	0.001015	J
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:32		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:31		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:09	2/24/23 11:09		1	0.211	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	157	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2160	mg/L		125	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	157	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 20:25	2/23/23 20:25		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: 3/22/2023
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: Gorgas Landfill - MW-15

Location Code: WMWGORLF
Collected: 2/20/23 13:17
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04077

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:15	2/24/23 14:15		1	2.00	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:40	2/27/23 12:40		1	0.301	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:01	3/1/23 14:01		50	1400	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/20/23 13:14	2/20/23 13:14			2389.42	uS/cm			FA
pH	2/20/23 13:14	2/20/23 13:14			6.08	SU			FA
Temperature	2/20/23 13:14	2/20/23 13:14			18.93	C			FA
Turbidity	2/20/23 13:14	2/20/23 13:14			4.88	NTU			FA
Sulfide	2/20/23 13:14	2/20/23 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: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 13:17
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-15

Laboratory ID Number: BD04077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	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: WMWGORLF
Sample Date: 2/20/23 13:17
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-15

Laboratory ID Number: BD04077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 13:17
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-15

Laboratory ID Number: BD04077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-16

Location Code: WMWGORLF
Collected: 2/20/23 14:45
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04078

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/27/23 15:32		1.015	0.0416	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:18		10.15	297	mg/L	0.70035	4.06	RA
* Iron, Total	2/24/23 13:19	2/27/23 15:32		1.015	2.52	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/27/23 15:32		1.015	0.0166	mg/L	0.007105	0.01999956	J
* Magnesium, Total	2/24/23 13:19	3/2/23 13:13		10.15	248	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/27/23 15:32		1	12.7	mg/L			
* Silicon, Total	2/24/23 13:19	2/27/23 15:32		1.015	5.92	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/27/23 15:32		1.015	26.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:44		1.015	0.0418	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:32		10.15	306	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:44		1.015	2.49	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:44		1.015	0.0169	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:32		10.15	268	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:44		1	12.6	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:44		1.015	5.91	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:44		1.015	26.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:16		1.015	0.00216	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:16		1.015	0.0128	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:16		1.015	0.0103	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 19:10		5.075	2.73	mg/L	0.000761	0.005075	RA
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:16		1.015	0.000466	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 17:16		1.015	8.03	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.
Total Organic Carbon & Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: Gorgas Landfill - MW-16

Location Code: WMWGORLF
Collected: 2/20/23 14:45
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04078

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:16		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	0.00211	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	0.0111	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:13		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	0.00888	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:45		5.075	2.63	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	0.000846	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	7.03	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:35		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:35		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:15	2/24/23 11:15		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	370	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2330	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	370	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 20:43	2/23/23 20:43		1	1.10	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.
Total Organic Carbon & Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: Gorgas Landfill - MW-16

Location Code: WMWGORLF
Collected: 2/20/23 14:45
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04078

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/24/23 14:16	2/24/23 14:16		1	2.85	mg/L	0.50	1	
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/27/23 12:42	2/27/23 12:42		1	0.165	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/1/23 14:03	3/1/23 14:03		80	1350	mg/L	48.0	160	
Analytical Method: Field Measurements		***Analyst: DKG***							
Conductivity	2/20/23 14:43	2/20/23 14:43			2593.82	uS/cm			FA
pH	2/20/23 14:43	2/20/23 14:43			6.53	SU			FA
Temperature	2/20/23 14:43	2/20/23 14:43			19.63	C			FA
Turbidity	2/20/23 14:43	2/20/23 14:43			1.66	NTU			FA
Sulfide	2/20/23 14:43	2/20/23 14:43			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.
Total Organic Carbon & Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 14:45
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-16

Laboratory ID Number: BD04078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04078	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.101	0.102	0.104	0.0850 to 0.115	101	70.0 to 130	0.985	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04078	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.110	0.110	0.0988	0.0850 to 0.115	110	70.0 to 130	0.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04078	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.103	0.104	0.0999	0.0850 to 0.115	101	70.0 to 130	0.966	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04078	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.120	0.123	0.107	0.0850 to 0.115	107	70.0 to 130	2.47	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04078	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0915	0.0912	0.0997	0.0850 to 0.115	91.5	70.0 to 130	0.328	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04078	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.08	1.07	1.00	0.850 to 1.15	104	70.0 to 130	0.930	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04078	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0993	0.0984	0.104	0.0850 to 0.115	99.3	70.0 to 130	0.910	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04078	Calcium, Total	mg/L	-0.0229	0.152	5.00	296	308	4.80	4.25 to 5.75	-20.0	70.0 to 130	3.97	20.0
BD04078	Chloride	mg/L	0.0274	1.00	10.0	13.1	13.0	10.1	9.00 to 11.0	102	80.0 to 120	0.766	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04078	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.102	0.103	0.106	0.0850 to 0.115	102	70.0 to 130	0.976	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04078	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.116	0.114	0.112	0.0850 to 0.115	106	70.0 to 130	1.74	20.0
BD04078	Fluoride	mg/L	0.0384	0.125	2.50	2.72	2.79	2.59	2.25 to 2.75	102	80.0 to 120	2.54	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04078	Iron, Total	mg/L	0.000927	0.0176	0.2	2.70	2.68	0.200	0.170 to 0.230	90.0	70.0 to 130	0.743	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Organic Carbon & 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

Batch QC Summary

Alabama Power

Customer Account: WMWGORLF
Sample Date: 2/20/23 14:45
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-16

Laboratory ID Number: BD04078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04078	Lead, Total	mg/L	0.000011	0.000147	0.100	0.107	0.108	0.112	0.0850 to 0.115	107	70.0 to 130	0.930	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04078	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.233	0.227	0.198	0.170 to 0.230	108	70.0 to 130	2.61	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04078	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	253	252	5.01	4.25 to 5.75	100	70.0 to 130	0.396	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04078	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	2.74	2.72	0.107	0.0850 to 0.115	10.0	70.0 to 130	0.733	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04078	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.104	0.104	0.103	0.0850 to 0.115	104	70.0 to 130	0.00	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04078	Potassium, Total	mg/L	0.0259	0.367	10.0	17.7	18.2	10.3	8.50 to 11.5	96.7	70.0 to 130	2.79	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04078	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.103	0.103	0.103	0.0850 to 0.115	103	70.0 to 130	0.00	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04078	Silicon, Total	mg/L	0.000121	0.0440	1.00	6.85	6.81	0.995	0.850 to 1.15	93.0	70.0 to 130	0.586	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04078	Sodium, Total	mg/L	-0.000766	0.0880	5.00	31.7	31.2	4.88	4.25 to 5.75	112	70.0 to 130	1.59	20.0
BD04078	Sulfate	mg/L	0.0571	2.0	1600	2960	3050	19.3	18.0 to 22.0	101	80.0 to 120	3.00	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04078	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.111	0.107	0.110	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04078	Total Organic Carbon	mg/L	0.0924	1.00	10.0	11.5	13.9	25.5		104	80.0 to 120	18.9	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Organic Carbon & Nitrate-Nitrite matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 14:45
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-16

Laboratory ID Number: BD04078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04078	Nitrogen, Nitrate/Nitrite	mg/L as N	0.00	0.200	2.00	2.23	0.022	1.83	1.80 to 2.20	112	90.0 to 110	0.00	15.0
BD04078	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			3.05	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Total Organic Carbon & 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

Certificate Of Analysis

Alabama Power

Description: Gorgas Landfill - MW-16 Dup

Location Code: WMWGORLF
Collected: 2/20/23 14:45
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04079

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:17		1.015	0.0450	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:33		10.15	315	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 11:17		1.015	2.51	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/28/23 11:17		1.015	0.0166	mg/L	0.007105	0.01999956	J
* Magnesium, Total	2/24/23 13:19	2/28/23 14:33		10.15	269	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:17		1	12.7	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:17		1.015	5.93	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 11:17		1.015	25.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 11:47		1.015	0.0416	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:35		10.15	334	mg/L	0.70035	4.06	RA
* Iron, Dissolved	2/23/23 13:36	2/27/23 11:47		1.015	2.46	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 11:47		1.015	0.0164	mg/L	0.007105	0.01999956	J
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:35		10.15	291	mg/L	0.21315	4.06	RA
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 11:47		1	12.6	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 11:47		1.015	5.88	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 11:47		1.015	26.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:38		1.015	0.00206	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:38		1.015	0.0126	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:38		1.015	0.0103	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 19:31		5.075	2.59	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:38		1.015	0.000429	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 17:38		1.015	7.81	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: 3/22/2023
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: Gorgas Landfill - MW-16 Dup

Location Code: WMWGORLF
Collected: 2/20/23 14:45
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04079

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	0.00182	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	0.0107	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:17		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	0.00880	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:49		5.075	2.62	mg/L	0.000761	0.005075	RA
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	0.000528	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	7.08	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 15:39		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:39		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:20	2/24/23 11:20		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	357	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2320	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	357	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 21:58	2/23/23 21:58		1	1.02	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: 3/22/2023
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: Gorgas Landfill - MW-16 Dup

Location Code: WMWGORLF
Collected: 2/20/23 14:45
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04079

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:29	2/24/23 14:29		1	2.82	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:53	2/27/23 12:53		1	0.183	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:16	3/1/23 14:16		50	1350	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/20/23 14:43	2/20/23 14:43			2593.82	uS/cm			FA
pH	2/20/23 14:43	2/20/23 14:43			6.53	SU			FA
Temperature	2/20/23 14:43	2/20/23 14:43			19.63	C			FA
Turbidity	2/20/23 14:43	2/20/23 14:43			1.66	NTU			FA
Sulfide	2/20/23 14:43	2/20/23 14:43			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 14:45
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-16 Dup

Laboratory ID Number: BD04079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0898	0.0939	0.0965	0.0850 to 0.115	89.8	70.0 to 130	4.46	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04079	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0869	0.0903	0.0904	0.0850 to 0.115	86.9	70.0 to 130	3.84	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04079	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.100	0.106	0.0960	0.0850 to 0.115	98.2	70.0 to 130	5.83	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04079	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.108	0.0954	0.0850 to 0.115	94.3	70.0 to 130	2.82	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04079	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.104	0.102	0.108	0.0850 to 0.115	104	70.0 to 130	1.94	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04079	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.09	1.08	1.01	0.850 to 1.15	105	70.0 to 130	0.922	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04079	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0905	0.0950	0.0975	0.0850 to 0.115	90.5	70.0 to 130	4.85	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04079	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	316	324	5.07	4.25 to 5.75	-360	70.0 to 130	2.50	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04079	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0917	0.0975	0.0989	0.0850 to 0.115	91.7	70.0 to 130	6.13	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04079	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.0979	0.102	0.0995	0.0850 to 0.115	89.1	70.0 to 130	4.10	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04079	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	2.65	2.63	0.202	0.170 to 0.230	95.0	70.0 to 130	0.758	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/20/23 14:45
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-16 Dup

Laboratory ID Number: BD04079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04079	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.0928	0.101	0.100	0.0850 to 0.115	92.8	70.0 to 130	8.46	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04079	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.228	0.225	0.194	0.170 to 0.230	106	70.0 to 130	1.32	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04079	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	279	285	5.09	4.25 to 5.75	-240	70.0 to 130	2.13	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04079	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	2.64	2.71	0.0997	0.0850 to 0.115	20.0	70.0 to 130	2.62	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04079	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00376	0.00369	0.00348	0.00340 to 0.00460	94.0	70.0 to 130	1.88	20.0
BD04079	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0959	0.0992	0.0972	0.0850 to 0.115	95.4	70.0 to 130	3.38	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04079	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	15.8	17.1	9.85	8.50 to 11.5	87.2	70.0 to 130	7.90	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04079	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.110	0.115	0.101	0.0850 to 0.115	110	70.0 to 130	4.44	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04079	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	6.89	6.88	1.01	0.850 to 1.15	101	70.0 to 130	0.145	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04079	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	31.9	31.6	4.91	4.25 to 5.75	108	70.0 to 130	0.945	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04079	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.0942	0.101	0.101	0.0850 to 0.115	94.2	70.0 to 130	6.97	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/20/23 14:45
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-16 Dup

Laboratory ID Number: BD04079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	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: Gorgas Landfill Field Blank-1

Location Code: WMWGORLFFB
Collected: 2/20/23 15:10
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04080

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:20		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	2/28/23 11:20		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	2/24/23 13:19	2/28/23 11:20		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	2/28/23 11:20		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	2/24/23 13:19	2/28/23 11:20		1.015	0.0359	mg/L	0.021315	0.406	J
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:20		1	Not Detected	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:20		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	2/24/23 13:19	2/28/23 11:20		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 17:41		1.015	0.000204	mg/L	0.000152	0.001015	J
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:41		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 02:59		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:22	2/24/23 11:22		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	Not Detected	mg/L		25	U

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

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Landfill Field Blank-1

Location Code: WMWGORLFFB
Collected: 2/20/23 15:10
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04080

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 22:14	2/23/23 22:14		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:30	2/24/23 14:30		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:54	2/27/23 12:54		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:17	3/1/23 14:17		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 3/22/2023
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: WMWGORLFFB
Sample Date: 2/20/23 15:10
Customer ID:
Delivery Date: 2/23/23 11:07

Description:Gorgas Landfill Field Blank-1

Laboratory ID Number: BD04080

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0

Comments:

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORLFFB
Sample Date: 2/20/23 15:10
Customer ID:
Delivery Date: 2/23/23 11:07

Description:Gorgas Landfill Field Blank-1

Laboratory ID Number: BD04080

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORLFFB
Sample Date: 2/20/23 15:10
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill Field Blank-1

Laboratory ID Number: BD04080

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Landfill - MW-17R

Location Code: WMWGORLF
Collected: 2/21/23 10:38
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04081

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:23		1.015	0.0469	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:37		101.5	352	mg/L	7.0035	40.6	
* Iron, Total	2/24/23 13:19	2/28/23 14:37		101.5	18.2	mg/L	0.8120	4.06	
* Lithium, Total	2/24/23 13:19	2/28/23 11:23		1.015	0.0412	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:37		101.5	382	mg/L	2.1315	40.6	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:23		1	16.9	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:23		1.015	7.92	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 11:23		1.015	36.7	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:03		1.015	0.0423	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:51		101.5	378	mg/L	7.0035	40.6	
* Iron, Dissolved	2/23/23 13:36	2/27/23 13:51		101.5	15.8	mg/L	0.8120	4.06	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:03		1.015	0.0428	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:51		101.5	419	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:03		1	16.8	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:03		1.015	7.87	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 12:03		1.015	37.2	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:45		1.015	0.00723	mg/L	0.006090	0.05075	J
* Arsenic, Total	2/24/23 13:19	2/27/23 17:45		1.015	0.00134	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:45		1.015	0.0135	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:45		1.015	0.325	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 19:35		92.365	17.7	mg/L	0.013855	0.092365	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:45		1.015	0.000181	mg/L	0.000102	0.000203	J
* Potassium, Total	2/24/23 13:19	2/27/23 17:45		1.015	7.12	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: 3/22/2023
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: Gorgas Landfill - MW-17R

Location Code: WMWGORLF
Collected: 2/21/23 10:38
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04081

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:45		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	0.00143	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	0.0117	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	0.251	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 11:59		92.365	16.5	mg/L	0.013855	0.092365	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	0.00130	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	6.51	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:02		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:24	2/24/23 11:24		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	178	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	3740	mg/L		227.3	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	178	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 22:31	2/23/23 22:31		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: 3/22/2023
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: Gorgas Landfill - MW-17R

Location Code: WMWGORLF
Collected: 2/21/23 10:38
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04081

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:31	2/24/23 14:31		1	2.20	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:56	2/27/23 12:56		1	0.198	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:19	3/1/23 14:19		80	2460	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/21/23 10:35	2/21/23 10:35			3602.75	uS/cm			FA
pH	2/21/23 10:35	2/21/23 10:35			6.07	SU			FA
Temperature	2/21/23 10:35	2/21/23 10:35			20.41	C			FA
Turbidity	2/21/23 10:35	2/21/23 10:35			1.8	NTU			FA
Sulfide	2/21/23 10:35	2/21/23 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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 10:38
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-17R

Laboratory ID Number: BD04081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 10:38
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-17R

Laboratory ID Number: BD04081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	20.0

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

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 10:38
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-17R

Laboratory ID Number: BD04081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	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: Gorgas Landfill - MW-18

Location Code: WMWGORLF
Collected: 2/21/23 11:40
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04082

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/28/23 11:27		1.015	0.0316	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:40		10.15	283	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 11:27		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	2/28/23 11:27		1.015	0.0473	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:40		10.15	283	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:27		1	13.4	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:27		1.015	6.28	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 11:27		1.015	28.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:06		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:54		10.15	288	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 12:06		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:06		1.015	0.0476	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:54		10.15	300	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:06		1	13.4	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:06		1.015	6.28	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 12:06		1.015	28.1	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 17:48		1.015	0.0112	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 17:48		1.015	0.000829	mg/L	0.000152	0.001015	J
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 17:48		1.015	6.71	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: 3/22/2023
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: Gorgas Landfill - MW-18

Location Code: WMWGORLF
Collected: 2/21/23 11:40
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04082

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:48		1.015	0.00436	mg/L	0.000508	0.001015	
* Thallium, Total	2/24/23 13:19	2/27/23 17:48		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	0.00893	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:41		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	0.000415	mg/L	0.000152	0.001015	J
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	0.00123	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	5.95	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	0.00408	mg/L	0.000508	0.001015	
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:06		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:26	2/24/23 11:26		1	0.473	mg/L as N	0.20	0.3	
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/3/23 14:10	3/3/23 15:40		1	144	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2480	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	144	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/3/23 14:10	3/3/23 15:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 22:46	2/23/23 22:46		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: 3/22/2023
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: Gorgas Landfill - MW-18

Location Code: WMWGORLF
Collected: 2/21/23 11:40
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04082

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:32	2/24/23 14:32		1	1.30	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:57	2/27/23 12:57		1	0.317	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:20	3/1/23 14:20		50	1610	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/21/23 11:37	2/21/23 11:37			2625.69	uS/cm			FA
pH	2/21/23 11:37	2/21/23 11:37			6.63	SU			FA
Temperature	2/21/23 11:37	2/21/23 11:37			19.76	C			FA
Turbidity	2/21/23 11:37	2/21/23 11:37			0.87	NTU			FA
Sulfide	2/21/23 11:37	2/21/23 11:37			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 11:40
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-18

Laboratory ID Number: BD04082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	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: WMWGORLF
Sample Date: 2/21/23 11:40
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-18

Laboratory ID Number: BD04082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/21/23 11:40
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-18

Laboratory ID Number: BD04082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04082	Alkalinity to pH 4.5	mg CaCO3/L					144	49.9	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	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: Gorgas Landfill - MW-19

Location Code: WMWGORLF
Collected: 2/21/23 12:46
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04083

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/28/23 11:30		1.015	0.0376	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:43		101.5	292	mg/L	7.0035	40.6	
* Iron, Total	2/24/23 13:19	2/28/23 11:30		1.015	3.87	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/28/23 11:30		1.015	0.0508	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:43		101.5	299	mg/L	2.1315	40.6	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:30		1	17.5	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:30		1.015	8.18	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 11:30		1.015	32.5	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:10		1.015	0.0331	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 13:57		101.5	297	mg/L	7.0035	40.6	
* Iron, Dissolved	2/23/23 13:36	2/27/23 12:10		1.015	1.81	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:10		1.015	0.0523	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 13:57		101.5	309	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:10		1	16.9	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:10		1.015	7.90	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 12:10		1.015	32.9	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 17:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:52		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:52		1.015	0.000311	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:52		1.015	0.0100	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:52		1.015	0.000246	mg/L	0.000203	0.001015	J
* Cobalt, Total	2/24/23 13:19	2/27/23 17:52		1.015	0.0440	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:52		1.015	0.0000751	mg/L	0.000068	0.000203	J
* Manganese, Total	2/24/23 13:19	2/27/23 19:38		5.075	2.84	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:52		1.015	0.000229	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 17:52		1.015	5.77	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: 3/22/2023
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: Gorgas Landfill - MW-19

Location Code: WMWGORLF
Collected: 2/21/23 12:46
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04083

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:52		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:52		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	0.00835	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:45		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	0.0000953	mg/L	0.000068	0.000203	J
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	0.0376	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 12:03		5.075	2.81	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	0.000328	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	5.27	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:10		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:28	2/24/23 11:28		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	200	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2910	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	200	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 23:05	2/23/23 23:05		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: 3/22/2023
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: Gorgas Landfill - MW-19

Location Code: WMWGORLF
Collected: 2/21/23 12:46
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04083

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:33	2/24/23 14:33		1	2.19	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:58	2/27/23 12:58		1	0.381	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:21	3/1/23 14:21		64	1960	mg/L	38.4	128	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/21/23 12:43	2/21/23 12:43			2971.83	uS/cm			FA
pH	2/21/23 12:43	2/21/23 12:43			6.32	SU			FA
Temperature	2/21/23 12:43	2/21/23 12:43			19.22	C			FA
Turbidity	2/21/23 12:43	2/21/23 12:43			2.24	NTU			FA
Sulfide	2/21/23 12:43	2/21/23 12:43			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 12:46
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-19

Laboratory ID Number: BD04083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	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: WMWGORLF
Sample Date: 2/21/23 12:46
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-19

Laboratory ID Number: BD04083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/21/23 12:46
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-19

Laboratory ID Number: BD04083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-19 Dup

Location Code: WMWGORLF
Collected: 2/21/23 12:46
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04084

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:33		1.015	0.0371	mg/L	0.030000	0.1015	J
* Calcium, Total	2/24/23 13:19	2/28/23 14:46		101.5	298	mg/L	7.0035	40.6	
* Iron, Total	2/24/23 13:19	2/28/23 11:33		1.015	3.23	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/28/23 11:33		1.015	0.0512	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:46		101.5	298	mg/L	2.1315	40.6	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:33		1	17.3	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:33		1.015	8.07	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 11:33		1.015	32.4	mg/L	0.03045	0.406	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:13		1.015	0.0332	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 14:00		101.5	300	mg/L	7.0035	40.6	
* Iron, Dissolved	2/23/23 13:36	2/27/23 12:13		1.015	1.81	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:13		1.015	0.0522	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 14:00		101.5	314	mg/L	2.1315	40.6	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:13		1	17.0	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:13		1.015	7.94	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 12:13		1.015	32.8	mg/L	0.03045	0.406	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:55		1.015	0.000266	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:55		1.015	0.00993	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:55		1.015	0.0445	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:55		1.015	0.0000696	mg/L	0.000068	0.000203	J
* Manganese, Total	2/24/23 13:19	2/27/23 19:42		5.075	2.80	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:55		1.015	0.000167	mg/L	0.000102	0.000203	J
* Potassium, Total	2/24/23 13:19	2/27/23 17:55		1.015	5.97	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: 3/22/2023
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: Gorgas Landfill - MW-19 Dup

Location Code: WMWGORLF
Collected: 2/21/23 12:46
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04084

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:55		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	0.0000987	mg/L	0.000081	0.000203	J
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	0.00882	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:48		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	0.0380	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 12:06		5.075	2.83	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	0.000591	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	5.34	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:13		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:14		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:30	2/24/23 11:30		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	200	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2900	mg/L		178.6	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	200	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 23:18	2/23/23 23:18		1	4.90	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: 3/22/2023
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: Gorgas Landfill - MW-19 Dup

Location Code: WMWGORLF
Collected: 2/21/23 12:46
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04084

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:35	2/24/23 14:35		1	2.17	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 12:59	2/27/23 12:59		1	0.382	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:22	3/1/23 14:22		64	1920	mg/L	38.4	128	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/21/23 12:43	2/21/23 12:43			2971.83	uS/cm			FA
pH	2/21/23 12:43	2/21/23 12:43			6.32	SU			FA
Temperature	2/21/23 12:43	2/21/23 12:43			19.22	C			FA
Turbidity	2/21/23 12:43	2/21/23 12:43			2.24	NTU			FA
Sulfide	2/21/23 12:43	2/21/23 12:43			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 12:46
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-19 Dup

Laboratory ID Number: BD04084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	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: WMWGORLF
Sample Date: 2/21/23 12:46
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-19 Dup

Laboratory ID Number: BD04084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/21/23 12:46
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-19 Dup

Laboratory ID Number: BD04084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-20

Location Code: WMWGORLF
Collected: 2/21/23 14:00
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04085

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:36		1.015	0.104	mg/L	0.030000	0.1015	
* Calcium, Total	2/24/23 13:19	2/28/23 14:49		10.15	310	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 14:49		10.15	6.84	mg/L	0.08120	0.406	
* Lithium, Total	2/24/23 13:19	2/28/23 11:36		1.015	0.190	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:49		10.15	165	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:36		1	21.2	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:36		1.015	9.89	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 14:49		10.15	130	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:16		1.015	0.100	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 14:03		10.15	324	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 14:03		10.15	6.91	mg/L	0.08120	0.406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:16		1.015	0.192	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 14:03		10.15	176	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:16		1	20.8	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:16		1.015	9.74	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 14:03		10.15	137	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 17:59		1.015	0.000706	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 17:59		1.015	0.0164	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 17:59		1.015	0.000330	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 17:59		1.015	1.11	mg/L	0.000152	0.001015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 17:59		1.015	0.000949	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 17:59		1.015	6.06	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: 3/22/2023
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: Gorgas Landfill - MW-20

Location Code: WMWGORLF
Collected: 2/21/23 14:00
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04085

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 17:59		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	0.000634	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	0.0158	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:52		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	0.000270	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	1.00	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	0.00188	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	5.45	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:17		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:18		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:32	2/24/23 11:32		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	258	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2220	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	258	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/23/23 23:33	2/23/23 23:33		1	3.40	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: 3/22/2023
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: Gorgas Landfill - MW-20

Location Code: WMWGORLF
Collected: 2/21/23 14:00
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04085

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:43	2/24/23 14:43		5	58.9	mg/L	2.50	5	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 13:00	2/27/23 13:00		1	0.148	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:23	3/1/23 14:23		50	1390	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/21/23 13:56	2/21/23 13:56			2686.59	uS/cm			FA
pH	2/21/23 13:56	2/21/23 13:56			6.81	SU			FA
Temperature	2/21/23 13:56	2/21/23 13:56			19.48	C			FA
Turbidity	2/21/23 13:56	2/21/23 13:56			0.84	NTU			FA
Sulfide	2/21/23 13:56	2/21/23 13:56			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 14:00
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-20

Laboratory ID Number: BD04085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	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: WMWGORLF
Sample Date: 2/21/23 14:00
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-20

Laboratory ID Number: BD04085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/21/23 14:00
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-20

Laboratory ID Number: BD04085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill Equipment Blank-1

Location Code: WMWGORLFEB
Collected: 2/21/23 14:35
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04086

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.030000	0.1015	U
* Calcium, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.070035	0.406	U
* Iron, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.008120	0.0406	U
* Lithium, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.007105	0.01999956	U
* Magnesium, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.021315	0.406	U
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:39		1	Not Detected	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.02030	0.25375	U
* Sodium, Total	2/24/23 13:19	2/28/23 11:39		1.015	Not Detected	mg/L	0.03045	0.406	U
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000081	0.000203	U
* Barium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Beryllium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Lead, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 18:02		1.015	0.000307	mg/L	0.000152	0.001015	J
* Molybdenum, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000102	0.000203	U
* Potassium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.169505	0.5075	U
* Selenium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 18:02		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:22		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:37	2/24/23 11:37		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	Not Detected	mg/L		25	U

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

Comments:

Reported: 3/22/2023
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: Gorgas Landfill Equipment Blank-1

Location Code: WMWGORLFEB
Collected: 2/21/23 14:35
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04086

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM 5310 B		***Analyst: SC***							
* Total Organic Carbon	2/23/23 23:48	2/23/23 23:48		1	Not Detected	mg/L	1.00	2	U
Analytical Method: SM4500Cl E		***Analyst: JCC***							
* Chloride	2/24/23 14:37	2/24/23 14:37		1	Not Detected	mg/L	0.50	1	U
Analytical Method: SM4500F G 2017		***Analyst: JCC***							
* Fluoride	2/27/23 13:02	2/27/23 13:02		1	Not Detected	mg/L	0.06	0.125	U
Analytical Method: SM4500SO4 E 2011		***Analyst: JCC***							
* Sulfate	3/1/23 14:25	3/1/23 14:25		1	Not Detected	mg/L	0.6	2	U

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

Comments:

Reported: 3/22/2023
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: WMWGORLFEB
Sample Date: 2/21/23 14:35
Customer ID:
Delivery Date: 2/23/23 11:07

Description:Gorgas Landfill Equipment Blank-1

Laboratory ID Number: BD04086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0

Comments:

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

Batch QC Summary

Alabama Power

Customer Account: WMWGORLFEB
Sample Date: 2/21/23 14:35
Customer ID:
Delivery Date: 2/23/23 11:07

Description:Gorgas Landfill Equipment Blank-1

Laboratory ID Number: BD04086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	20.0

Comments:

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

Alabama Power

Batch QC Summary

Customer Account: WMWGORLFEB
Sample Date: 2/21/23 14:35
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill Equipment Blank-1

Laboratory ID Number: BD04086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

Comments:

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

Certificate Of Analysis

Alabama Power

Description: Gorgas Landfill - MW-11

Location Code: WMWGORLF
Collected: 2/21/23 15:25
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04087

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:43		1.015	0.104	mg/L	0.030000	0.1015	
* Calcium, Total	2/24/23 13:19	2/28/23 14:52		10.15	314	mg/L	0.70035	4.06	
* Iron, Total	2/24/23 13:19	2/28/23 11:43		1.015	3.94	mg/L	0.008120	0.0406	
* Lithium, Total	2/24/23 13:19	2/28/23 11:43		1.015	0.204	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:52		10.15	165	mg/L	0.21315	4.06	
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:43		1	21.4	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:43		1.015	9.99	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 14:52		10.15	139	mg/L	0.3045	4.06	
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:19		1.015	0.101	mg/L	0.030000	0.1015	J
* Calcium, Dissolved	2/23/23 13:36	2/27/23 14:07		10.15	327	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 12:19		1.015	3.86	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:19		1.015	0.206	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 14:07		10.15	178	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:19		1	21.2	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:19		1.015	9.91	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 14:07		10.15	147	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 18:06		1.015	0.00821	mg/L	0.006090	0.05075	J
* Arsenic, Total	2/24/23 13:19	2/27/23 18:06		1.015	0.000859	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 18:06		1.015	0.0167	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 18:06		1.015	0.000889	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 19:45		5.075	1.46	mg/L	0.000761	0.005075	
* Molybdenum, Total	2/24/23 13:19	2/27/23 18:06		1.015	0.00138	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 18:06		1.015	6.25	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: 3/22/2023
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: Gorgas Landfill - MW-11

Location Code: WMWGORLF
Collected: 2/21/23 15:25
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04087

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 18:06		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	0.000801	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	0.0144	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:55		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	0.000846	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/28/23 12:21		5.075	1.52	mg/L	0.000761	0.005075	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	0.00164	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	5.70	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:21		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:26		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:39	2/24/23 11:39		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	270	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2160	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	269	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	0.517	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 00:03	2/24/23 00:03		1	4.96	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: 3/22/2023
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: Gorgas Landfill - MW-11

Location Code: WMWGORLF
Collected: 2/21/23 15:25
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04087

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:44	2/24/23 14:44		4	50.4	mg/L	2.00	4	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 13:03	2/27/23 13:03		1	0.129	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:26	3/1/23 14:26		50	1290	mg/L	30.0	100	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/21/23 15:22	2/21/23 15:22			2597.79	uS/cm			FA
pH	2/21/23 15:22	2/21/23 15:22			6.77	SU			FA
Temperature	2/21/23 15:22	2/21/23 15:22			20.11	C			FA
Turbidity	2/21/23 15:22	2/21/23 15:22			0.8	NTU			FA
Sulfide	2/21/23 15:22	2/21/23 15:22			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/21/23 15:25
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-11

Laboratory ID Number: BD04087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	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: WMWGORLF
Sample Date: 2/21/23 15:25
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-11

Laboratory ID Number: BD04087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/21/23 15:25
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-11

Laboratory ID Number: BD04087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-12V

Location Code: WMWGORLF
Collected: 2/22/23 12:35
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04088

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***				***Preparation Method: EPA 1638***				
* Boron, Total	2/24/23 13:19	2/28/23 11:46		1.015	0.152	mg/L	0.030000	0.1015	
* Calcium, Total	2/24/23 13:19	2/28/23 14:56		10.15	297	mg/L	0.70035	4.06	RA
* Iron, Total	2/24/23 13:19	2/28/23 14:56		10.15	4.04	mg/L	0.08120	0.406	RA
* Lithium, Total	2/24/23 13:19	2/28/23 11:46		1.015	0.279	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 14:56		10.15	191	mg/L	0.21315	4.06	RA
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 11:46		1	15.2	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 11:46		1.015	7.11	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 14:56		10.15	152	mg/L	0.3045	4.06	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:22		1.015	0.151	mg/L	0.030000	0.1015	
* Calcium, Dissolved	2/23/23 13:36	2/27/23 14:10		10.15	277	mg/L	0.70035	4.06	
* Iron, Dissolved	2/23/23 13:36	2/27/23 12:22		1.015	3.54	mg/L	0.008120	0.0406	
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:22		1.015	0.287	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 14:10		10.15	187	mg/L	0.21315	4.06	
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:22		1	15.1	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:22		1.015	7.05	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 14:10		10.15	146	mg/L	0.3045	4.06	
Analytical Method: EPA 200.8	***Analyst: DLJ***				***Preparation Method: EPA 1638***				
* Antimony, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 18:09		1.015	0.00455	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 18:09		1.015	0.0198	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 18:09		1.015	0.000114	mg/L	0.000068	0.000203	J
* Lead, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Total	2/24/23 13:19	2/27/23 18:09		1.015	0.478	mg/L	0.000152	0.001015	
* Molybdenum, Total	2/24/23 13:19	2/27/23 18:09		1.015	0.00304	mg/L	0.000102	0.000203	
* Potassium, Total	2/24/23 13:19	2/27/23 18:09		1.015	7.31	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: 3/22/2023
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: Gorgas Landfill - MW-12V

Location Code: WMWGORLF
Collected: 2/22/23 12:35
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04088

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 18:09		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	0.00423	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	0.0174	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 10:59		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	0.0000949	mg/L	0.000068	0.000203	J
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Manganese, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	0.425	mg/L	0.000152	0.001015	
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	0.00288	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	6.49	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:25		1.015	Not Detected	mg/L	0.000068	0.000203	U
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:30		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:40	2/24/23 11:40		1	Not Detected	mg/L as N	0.20	0.3	U
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	293	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/23/23 13:45	2/24/23 13:45		1	2240	mg/L		147.1	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	292	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	0.615	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 00:19	2/24/23 00:19		1	4.80	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: 3/22/2023
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: Gorgas Landfill - MW-12V

Location Code: WMWGORLF
Collected: 2/22/23 12:35
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04088

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 14:55	2/24/23 14:55		8	34.3	mg/L	4.00	8	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 13:04	2/27/23 13:04		1	0.199	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:27	3/1/23 14:27		80	1340	mg/L	48.0	160	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/22/23 12:32	2/22/23 12:32			2671.70	uS/cm			FA
pH	2/22/23 12:32	2/22/23 12:32			6.95	SU			FA
Temperature	2/22/23 12:32	2/22/23 12:32			22.78	C			FA
Turbidity	2/22/23 12:32	2/22/23 12:32			1.96	NTU			FA
Sulfide	2/22/23 12:32	2/22/23 12:32			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: 3/22/2023
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: WMWGORLF
Sample Date: 2/22/23 12:35
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-12V

Laboratory ID Number: BD04088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04088	Aluminum, Total	mg/L	0.000405	0.0198	0.100	0.102	0.105	0.104	0.0850 to 0.115	102	70.0 to 130	2.90	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04088	Antimony, Total	mg/L	0.000397	0.00100	0.100	0.108	0.117	0.0988	0.0850 to 0.115	108	70.0 to 130	8.00	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04088	Arsenic, Total	mg/L	0.0000097	0.000200	0.100	0.104	0.111	0.0999	0.0850 to 0.115	99.4	70.0 to 130	6.51	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04088	Barium, Total	mg/L	-0.0000132	0.00100	0.100	0.127	0.136	0.107	0.0850 to 0.115	107	70.0 to 130	6.84	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04088	Beryllium, Total	mg/L	0.0000113	0.000880	0.100	0.0983	0.101	0.0997	0.0850 to 0.115	98.3	70.0 to 130	2.71	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04088	Boron, Total	mg/L	-0.00347	0.0650	1.00	1.18	1.17	1.00	0.850 to 1.15	103	70.0 to 130	0.851	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04088	Cadmium, Total	mg/L	0.0000042	0.000147	0.100	0.0992	0.106	0.104	0.0850 to 0.115	99.2	70.0 to 130	6.63	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04088	Calcium, Total	mg/L	-0.0229	0.152	5.00	312	300	4.80	4.25 to 5.75	300	70.0 to 130	3.92	20.0
BD04088	Chloride	mg/L	0.0239	1.00	80.0	121	114	10.0	9.00 to 11.0	108	80.0 to 120	5.96	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04088	Chromium, Total	mg/L	0.0000667	0.000440	0.100	0.100	0.104	0.106	0.0850 to 0.115	100	70.0 to 130	3.92	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04088	Cobalt, Total	mg/L	0.0000023	0.000147	0.100	0.104	0.109	0.112	0.0850 to 0.115	104	70.0 to 130	4.69	20.0
BD04088	Fluoride	mg/L	0.0375	0.125	2.50	2.77	2.78	2.62	2.25 to 2.75	103	80.0 to 120	0.360	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04088	Iron, Total	mg/L	0.000927	0.0176	0.2	4.48	4.16	0.200	0.170 to 0.230	220	70.0 to 130	7.41	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: WMWGORLF
Sample Date: 2/22/23 12:35
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-12V

Laboratory ID Number: BD04088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04088	Lead, Total	mg/L	0.000011	0.000147	0.100	0.109	0.112	0.112	0.0850 to 0.115	109	70.0 to 130	2.71	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04088	Lithium, Total	mg/L	-0.000337	0.0154	0.200	0.483	0.481	0.198	0.170 to 0.230	102	70.0 to 130	0.415	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04088	Magnesium, Total	mg/L	-0.00494	0.0462	5.00	203	196	5.01	4.25 to 5.75	240	70.0 to 130	3.51	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04088	Manganese, Total	mg/L	-0.0000306	0.00033	0.100	0.570	0.596	0.107	0.0850 to 0.115	92.0	70.0 to 130	4.46	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04088	Molybdenum, Total	mg/L	0.000028	0.0002	0.100	0.105	0.112	0.103	0.0850 to 0.115	102	70.0 to 130	6.45	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04088	Potassium, Total	mg/L	0.0259	0.367	10.0	17.5	17.8	10.3	8.50 to 11.5	102	70.0 to 130	1.70	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04088	Selenium, Total	mg/L	0.0000768	0.00100	0.100	0.0994	0.106	0.103	0.0850 to 0.115	99.4	70.0 to 130	6.43	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04088	Silicon, Total	mg/L	0.000121	0.0440	1.00	8.10	8.05	0.995	0.850 to 1.15	99.0	70.0 to 130	0.619	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04088	Sodium, Total	mg/L	-0.000766	0.0880	5.00	162	157	4.88	4.25 to 5.75	200	70.0 to 130	3.13	20.0
BD04088	Sulfate	mg/L	0.0257	2.0	1600	2980	3210	18.9	18.0 to 22.0	102	80.0 to 120	7.43	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04088	Thallium, Total	mg/L	0.0000046	0.000147	0.100	0.109	0.113	0.110	0.0850 to 0.115	109	70.0 to 130	3.60	20.0
BD04088	Total Organic Carbon	mg/L	0.0453	1.00	10.0	14.8	15.2	27.1		100	80.0 to 120	2.67	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: WMWGORLF
Sample Date: 2/22/23 12:35
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-12V

Laboratory ID Number: BD04088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04088	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.97	0.005	1.88	1.80 to 2.20	98.5	90.0 to 110	0.00	15.0
BD04088	Solids, Dissolved	mg/L	1.00	25.0			2260	50.0	40.0 to 60.0			0.889	10.0

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

Reported: 3/22/2023
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: Gorgas Landfill - MW-12

Location Code: WMWGORLF
Collected: 2/22/23 13:47
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04089

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: EPA 200.7	***Analyst: ABB***					***Preparation Method: EPA 1638***			
* Boron, Total	2/24/23 13:19	2/28/23 12:08		1.015	0.153	mg/L	0.030000	0.1015	
* Calcium, Total	2/24/23 13:19	2/28/23 15:05		101.5	304	mg/L	7.0035	40.6	RA
* Iron, Total	2/24/23 13:19	2/28/23 15:05		101.5	164	mg/L	0.8120	4.06	RA
* Lithium, Total	2/24/23 13:19	2/28/23 12:08		1.015	0.0615	mg/L	0.007105	0.01999956	
* Magnesium, Total	2/24/23 13:19	2/28/23 15:05		101.5	342	mg/L	2.1315	40.6	RA
* Silica, Total (calc.)	2/24/23 13:19	2/28/23 12:08		1	30.8	mg/L			
* Silicon, Total	2/24/23 13:19	2/28/23 12:08		1.015	14.4	mg/L	0.02030	0.25375	
* Sodium, Total	2/24/23 13:19	2/28/23 15:05		101.5	44.8	mg/L	3.045	40.6	RA
Analytical Method: EPA 200.7	***Analyst: ABB***								
* Boron, Dissolved	2/23/23 13:36	2/27/23 12:25		1.015	0.148	mg/L	0.030000	0.1015	
* Calcium, Dissolved	2/23/23 13:36	2/27/23 14:13		101.5	325	mg/L	7.0035	40.6	RA
* Iron, Dissolved	2/23/23 13:36	2/27/23 14:13		101.5	158	mg/L	0.8120	4.06	RA
* Lithium, Dissolved	2/23/23 13:36	2/27/23 12:25		1.015	0.0613	mg/L	0.007105	0.01999956	
* Magnesium, Dissolved	2/23/23 13:36	2/27/23 14:13		101.5	379	mg/L	2.1315	40.6	RA
* Silica, Dissolved (calc.)	2/23/23 13:36	2/27/23 12:25		1	30.6	mg/L			
* Silicon, Dissolved	2/23/23 13:36	2/27/23 12:25		1.015	14.3	mg/L	0.02030	0.25375	
* Sodium, Dissolved	2/23/23 13:36	2/27/23 14:13		101.5	50.8	mg/L	3.045	40.6	RA
Analytical Method: EPA 200.8	***Analyst: DLJ***					***Preparation Method: EPA 1638***			
* Antimony, Total	2/24/23 13:19	2/27/23 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Total	2/24/23 13:19	2/27/23 18:38		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Total	2/24/23 13:19	2/27/23 18:38		1.015	0.0651	mg/L	0.000081	0.000203	
* Barium, Total	2/24/23 13:19	2/27/23 18:38		1.015	0.0131	mg/L	0.000508	0.001015	
* Beryllium, Total	2/24/23 13:19	2/27/23 18:38		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Total	2/24/23 13:19	2/27/23 18:38		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Total	2/24/23 13:19	2/27/23 18:38		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Total	2/24/23 13:19	2/27/23 18:38		1.015	0.0535	mg/L	0.000068	0.000203	
* Lead, Total	2/24/23 13:19	2/27/23 18:38		1.015	0.000214	mg/L	0.000068	0.000203	
* Manganese, Total	2/24/23 13:19	2/27/23 19:49		92.365	17.2	mg/L	0.013855	0.092365	RA
* Molybdenum, Total	2/24/23 13:19	2/27/23 18:38		1.015	0.000131	mg/L	0.000102	0.000203	J
* Potassium, Total	2/24/23 13:19	2/27/23 18:38		1.015	22.8	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.
Nitrate-Nitrite precision, matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: Gorgas Landfill - MW-12

Location Code: WMWGORLF
Collected: 2/22/23 13:47
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04089

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
* Selenium, Total	2/24/23 13:19	2/27/23 18:38		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Total	2/24/23 13:19	2/27/23 18:38		1.015	0.000112	mg/L	0.000068	0.000203	J
Analytical Method: EPA 200.8	***Analyst: DLJ***								
* Antimony, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Aluminum, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	Not Detected	mg/L	0.006090	0.05075	U
* Arsenic, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	0.0599	mg/L	0.000081	0.000203	
* Barium, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	0.0105	mg/L	0.000508	0.001015	
* Beryllium, Dissolved	2/23/23 13:36	2/28/23 11:02		1.015	Not Detected	mg/L	0.000406	0.001015	U
* Cadmium, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	Not Detected	mg/L	0.000068	0.000203	U
* Chromium, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	Not Detected	mg/L	0.000203	0.001015	U
* Cobalt, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	0.0438	mg/L	0.000068	0.000203	
* Lead, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	0.0000924	mg/L	0.000068	0.000203	J
* Manganese, Dissolved	2/23/23 13:36	2/28/23 12:24		92.365	20.7	mg/L	0.013855	0.092365	RA
* Molybdenum, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	0.000455	mg/L	0.000102	0.000203	
* Potassium, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	18.2	mg/L	0.169505	0.5075	
* Selenium, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	Not Detected	mg/L	0.000508	0.001015	U
* Thallium, Dissolved	2/23/23 13:36	2/23/23 16:28		1.015	0.000107	mg/L	0.000068	0.000203	J
Analytical Method: EPA 245.1	***Analyst: ELH***								
* Mercury, Total by CVAA	2/27/23 19:37	2/28/23 03:34		1	Not Detected	mg/L	0.0003	0.0005	U
Analytical Method: EPA 353.2	***Analyst: SC***								
* Nitrogen, Nitrate/Nitrite	2/24/23 11:42	2/24/23 11:42		1	0.298	mg/L as N	0.20	0.3	J
Analytical Method: SM 2320 B	***Analyst: ALH***								
* Alkalinity to pH 4.5	3/6/23 13:15	3/6/23 14:40		1	214	mg CaCO3/L			
Analytical Method: SM 2540C	***Analyst: CNJ***								
* Solids, Dissolved	2/24/23 10:25	2/27/23 13:48		1	3880	mg/L		208.3	
Analytical Method: SM 4500CO2 D	***Analyst: ALH***								
* Bicarbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	214	mg CaCO3/L		1	A
* Carbonate Alkalinity, (calc.)	3/6/23 13:15	3/6/23 14:40		1	Not Detected	mg CaCO3/L		0.5	A
Analytical Method: SM 5310 B	***Analyst: SC***								
* Total Organic Carbon	2/24/23 01:38	2/24/23 01:38		1	15.6	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.
Nitrate-Nitrite precision, matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: Gorgas Landfill - MW-12

Location Code: WMWGORLF
Collected: 2/22/23 13:47
Customer ID:
Submittal Date: 2/23/23 11:07

Laboratory ID Number: BD04089

Name	Prepared	Analyzed	Vio Spec	DF	Results	Units	MDL	RL	Q
Analytical Method: SM4500Cl E	***Analyst: JCC***								
* Chloride	2/24/23 15:07	2/24/23 15:07		1	10.9	mg/L	0.50	1	
Analytical Method: SM4500F G 2017	***Analyst: JCC***								
* Fluoride	2/27/23 13:15	2/27/23 13:15		1	0.239	mg/L	0.06	0.125	
Analytical Method: SM4500SO4 E 2011	***Analyst: JCC***								
* Sulfate	3/1/23 14:39	3/1/23 14:39		100	2440	mg/L	60.0	200	
Analytical Method: Field Measurements	***Analyst: DKG***								
Conductivity	2/22/23 13:44	2/22/23 13:44			3585.09	uS/cm			FA
pH	2/22/23 13:44	2/22/23 13:44			5.72	SU			FA
Temperature	2/22/23 13:44	2/22/23 13:44			21.83	C			FA
Turbidity	2/22/23 13:44	2/22/23 13:44			3.81	NTU			FA
Sulfide	2/22/23 13:44	2/22/23 13:44			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 precision, matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: WMWGORLF
Sample Date: 2/22/23 13:47
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-12

Laboratory ID Number: BD04089

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Aluminum, Dissolved	mg/L	-0.000276	0.0198	0.100	0.0922	0.0981	0.0965	0.0850 to 0.115	92.2	70.0 to 130	6.20	20.0
BD04089	Aluminum, Total	mg/L	0.000636	0.0198	0.100	0.105	0.103	0.101	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD04089	Antimony, Dissolved	mg/L	0.000346	0.00100	0.100	0.0972	0.101	0.0904	0.0850 to 0.115	97.2	70.0 to 130	3.83	20.0
BD04089	Antimony, Total	mg/L	0.000349	0.00100	0.100	0.108	0.109	0.0963	0.0850 to 0.115	108	70.0 to 130	0.922	20.0
BD04089	Arsenic, Dissolved	mg/L	-0.0000191	0.000200	0.100	0.167	0.164	0.0960	0.0850 to 0.115	107	70.0 to 130	1.81	20.0
BD04089	Arsenic, Total	mg/L	0.0000129	0.000200	0.100	0.168	0.165	0.0992	0.0850 to 0.115	103	70.0 to 130	1.80	20.0
BD04089	Barium, Dissolved	mg/L	-0.0000092	0.00100	0.100	0.105	0.109	0.0954	0.0850 to 0.115	94.5	70.0 to 130	3.74	20.0
BD04089	Barium, Total	mg/L	-0.000013	0.00100	0.100	0.118	0.120	0.106	0.0850 to 0.115	105	70.0 to 130	1.68	20.0
BD04089	Beryllium, Dissolved	mg/L	0.0000161	0.000880	0.100	0.0944	0.0957	0.108	0.0850 to 0.115	94.4	70.0 to 130	1.37	20.0
BD04089	Beryllium, Total	mg/L	0.0000082	0.000880	0.100	0.0951	0.0984	0.104	0.0850 to 0.115	95.1	70.0 to 130	3.41	20.0
BD04089	Boron, Dissolved	mg/L	-0.00311	0.0650	1.00	1.18	1.18	1.01	0.850 to 1.15	103	70.0 to 130	0.00	20.0
BD04089	Boron, Total	mg/L	0.000025	0.0650	1.00	1.13	1.14	0.992	0.850 to 1.15	97.7	70.0 to 130	0.881	20.0
BD04089	Cadmium, Dissolved	mg/L	0.0000000	0.000147	0.100	0.0912	0.0945	0.0975	0.0850 to 0.115	91.2	70.0 to 130	3.55	20.0
BD04089	Cadmium, Total	mg/L	0.0000068	0.000147	0.100	0.102	0.102	0.103	0.0850 to 0.115	102	70.0 to 130	0.00	20.0
BD04089	Calcium, Dissolved	mg/L	-0.0143	0.152	5.00	312	312	5.07	4.25 to 5.75	-260	70.0 to 130	0.00	20.0
BD04089	Calcium, Total	mg/L	-0.0162	0.152	5.00	310	315	4.84	4.25 to 5.75	120	70.0 to 130	1.60	20.0
BD04089	Chloride	mg/L	0.0485	1.00	10.0	19.9	20.1	9.94	9.00 to 11.0	90.0	80.0 to 120	1.00	20.0
BD04089	Chromium, Dissolved	mg/L	-0.0000558	0.000440	0.100	0.0928	0.0973	0.0989	0.0850 to 0.115	92.8	70.0 to 130	4.73	20.0
BD04089	Chromium, Total	mg/L	0.0000069	0.000440	0.100	0.102	0.0992	0.103	0.0850 to 0.115	102	70.0 to 130	2.78	20.0
BD04089	Cobalt, Dissolved	mg/L	-0.0000015	0.000147	0.100	0.139	0.146	0.0995	0.0850 to 0.115	95.2	70.0 to 130	4.91	20.0
BD04089	Cobalt, Total	mg/L	0.0000003	0.000147	0.100	0.161	0.157	0.108	0.0850 to 0.115	108	70.0 to 130	2.52	20.0
BD04089	Fluoride	mg/L	0.0293	0.125	2.50	2.69	2.71	2.51	2.25 to 2.75	98.0	80.0 to 120	0.741	20.0
BD04089	Iron, Dissolved	mg/L	-0.000232	0.0176	0.2	163	167	0.202	0.170 to 0.230	2500	70.0 to 130	2.42	20.0
BD04089	Iron, Total	mg/L	0.000997	0.0176	0.2	164	165	0.202	0.170 to 0.230	0.00	70.0 to 130	0.608	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate-Nitrite precision, 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

Batch QC Summary

Alabama Power

Customer Account: WMWGORLF
Sample Date: 2/22/23 13:47
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-12

Laboratory ID Number: BD04089

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Lead, Dissolved	mg/L	0.0000017	0.000147	0.100	0.102	0.104	0.100	0.0850 to 0.115	102	70.0 to 130	1.94	20.0
BD04089	Lead, Total	mg/L	0.0000059	0.000147	0.100	0.108	0.108	0.111	0.0850 to 0.115	108	70.0 to 130	0.00	20.0
BD04089	Lithium, Dissolved	mg/L	0.000766	0.0154	0.200	0.280	0.277	0.194	0.170 to 0.230	109	70.0 to 130	1.08	20.0
BD04089	Lithium, Total	mg/L	-0.000372	0.0154	0.200	0.277	0.275	0.202	0.170 to 0.230	108	70.0 to 130	0.725	20.0
BD04089	Magnesium, Dissolved	mg/L	-0.0245	0.0462	5.00	359	358	5.09	4.25 to 5.75	-400	70.0 to 130	0.279	20.0
BD04089	Magnesium, Total	mg/L	-0.00153	0.0462	5.00	344	348	5.01	4.25 to 5.75	40.0	70.0 to 130	1.16	20.0
BD04089	Manganese, Dissolved	mg/L	0.0000252	0.00033	0.100	21.2	20.9	0.0997	0.0850 to 0.115	500	70.0 to 130	1.43	20.0
BD04089	Manganese, Total	mg/L	0.0000492	0.00033	0.100	20.6	19.4	0.103	0.0850 to 0.115	3400	70.0 to 130	6.00	20.0
BD04089	Mercury, Total by CVAA	mg/L	-1.000E-05	0.000500	0.004	0.00367	0.00372	0.00348	0.00340 to 0.00460	91.8	70.0 to 130	1.35	20.0
BD04089	Molybdenum, Dissolved	mg/L	0.0000079	0.0002	0.100	0.0939	0.0976	0.0972	0.0850 to 0.115	93.4	70.0 to 130	3.86	20.0
BD04089	Molybdenum, Total	mg/L	0.0000215	0.0002	0.100	0.105	0.105	0.102	0.0850 to 0.115	105	70.0 to 130	0.00	20.0
BD04089	Potassium, Dissolved	mg/L	-0.00373	0.367	10.0	29.3	31.0	9.85	8.50 to 11.5	111	70.0 to 130	5.64	20.0
BD04089	Potassium, Total	mg/L	0.0422	0.367	10.0	34.9	34.6	10.3	8.50 to 11.5	121	70.0 to 130	0.863	20.0
BD04089	Selenium, Dissolved	mg/L	-0.0000434	0.00100	0.100	0.111	0.107	0.101	0.0850 to 0.115	111	70.0 to 130	3.67	20.0
BD04089	Selenium, Total	mg/L	0.000111	0.00100	0.100	0.105	0.103	0.101	0.0850 to 0.115	105	70.0 to 130	1.92	20.0
BD04089	Silicon, Dissolved	mg/L	-0.000019	0.0440	1.00	15.2	15.2	1.01	0.850 to 1.15	90.0	70.0 to 130	0.00	20.0
BD04089	Silicon, Total	mg/L	-0.000001	0.0440	1.00	15.4	15.3	1.00	0.850 to 1.15	100	70.0 to 130	0.651	20.0
BD04089	Sodium, Dissolved	mg/L	-0.00164	0.0880	5.00	44.2	48.6	4.91	4.25 to 5.75	-132	70.0 to 130	9.48	20.0
BD04089	Sodium, Total	mg/L	-0.000232	0.0880	5.00	47.2	47.8	5.08	4.25 to 5.75	48.0	70.0 to 130	1.26	20.0
BD04089	Sulfate	mg/L	0.221	2.0	2000	4490	4440	18.9	18.0 to 22.0	102	80.0 to 120	1.12	20.0
BD04089	Thallium, Dissolved	mg/L	-0.0000047	0.000147	0.100	0.101	0.105	0.101	0.0850 to 0.115	101	70.0 to 130	3.88	20.0
BD04089	Thallium, Total	mg/L	0.0000032	0.000147	0.100	0.107	0.107	0.111	0.0850 to 0.115	107	70.0 to 130	0.00	20.0
BD04089	Total Organic Carbon	mg/L	0.0531	1.00	10.0	26.1	25.6	25.8		105	80.0 to 120	1.93	20.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate-Nitrite precision, 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

Alabama Power

Batch QC Summary

Customer Account: WMWGORLF
Sample Date: 2/22/23 13:47
Customer ID:
Delivery Date: 2/23/23 11:07

Description: Gorgas Landfill - MW-12

Laboratory ID Number: BD04089

Sample	Analysis	Units	MB	MB Limit	Spike	MS	Sample Duplicate	Standard	Standard Limit	Rec	Rec Limit	Prec	Prec Limit
BD04089	Alkalinity to pH 4.5	mg CaCO3/L					214	50.4	45.0 to 55.0			0.00	10.0
BD04089	Nitrogen, Nitrate/Nitrite	mg/L as N	-0.02	0.200	2.00	1.81	0.378	1.88	1.80 to 2.20	75.6	90.0 to 110	23.7	15.0
BD04089	Solids, Dissolved	mg/L	2.00	25.0			3860	54.0	40.0 to 60.0			0.517	10.0

Comments: Filtered LCS and MB were not submitted or analyzed with Dissolved Metals.
Nitrate-Nitrite precision, matrix spike recovery and/or matrix spike duplicate recovery is outside of specification limit.

Reported: 3/22/2023
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: WMWGORLF_1399

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.
C	Analyte was verified by re-analysis.
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	Gorgas Landfill

Bottles													
	1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
	2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-5	02/21/2023	12:22	6	Groundwater		BD04069	☑
MW-7	02/21/2023	14:25	6	Groundwater		BD04070	☑
MW-8	02/21/2023	15:40	6	Groundwater		BD04071	☑
MW-6	02/22/2023	13:20	6	Groundwater		BD04072	☑
FB-2	02/22/2023	14:10	5	Field Blank		BD04073	☑
MW-10	02/22/2023	14:30	6	Groundwater		BD04074	☑
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Relinquished By	Received By	Date/Time
		02/22/2023 16:30
		02/23/2023 08:38

SmarTroll ID	7586-41445-5-4	Cooler Temp	1.1 °C
Turbidity ID	4677-23343-4-2	Thermometer ID	10614-61208-2-1
Sample Event	1399	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

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	Gorgas Landfill

Bottles													
	1	Metals	500 mL	3	Hg	250 mL	5	TDS/Alkalinity	500 mL	7	N/A	N/A
	2	Dissolved Metals	500 mL	4	Nitrite, Nitrate; TOC	250 mL	6	Anions	500 mL	8	N/A	N/A

Comments: Changed collection time from 1510 to 1435 on EB-1 per sample container. BC 02/23/23

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-13	02/20/2023	11:02	6	Groundwater		BD04075	☑
MW-14	02/20/2023	12:02	6	Groundwater		BD04076	☑
MW-15	02/20/2023	13:17	6	Groundwater		BD04077	☑
MW-16	02/20/2023	14:45	6	Groundwater		BD04078	☑
MW-16 dup	02/20/2023	14:45	6	Sample Duplicate		BD04079	☑
FB-1	02/20/2023	15:10	5	Field Blank		BD04080	☑
MW-17R	02/21/2023	10:38	6	Groundwater		BD04081	☑
MW-18	02/21/2023	11:40	6	Groundwater		BD04082	☑
MW-19	02/21/2023	12:46	6	Groundwater		BD04083	☑
MW-19 dup	02/21/2023	12:46	6	Sample Duplicate		BD04084	☑
MW-20	02/21/2023	14:00	6	Groundwater		BD04085	☑
EB-1	02/21/2023	14:35	5	Equipment Blank		BD04086	☑
MW-11	02/21/2023	15:25	6	Groundwater		BD04087	☑
MW-12V	02/22/2023	12:35	6	Groundwater		BD04088	☑
MW-12	02/22/2023	13:47	6	Groundwater		BD04089	☑
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Relinquished By	Received By	Date/Time
Dallas Gentry	Brooke Cotton	02/23/2023 08:37

SmarTroll ID	7586-41443-5-2	Cooler Temp	1.1 °C
Turbidity ID	9901-57263-1-1	Thermometer ID	10614-61208-2-1
Sample Event	1399	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

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	Gorgas Landfill

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 @ MW-10

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-5	02/21/2023	12:22	1	Groundwater		BD04090	☑
MW-7	02/21/2023	14:25	1	Groundwater		BD04091	☑
MW-8	02/21/2023	15:40	1	Groundwater		BD04092	☑
MW-6	02/22/2023	13:20	1	Groundwater		BD04093	☑
FB-2	02/22/2023	14:10	1	Field Blank		BD04094	☑
MW-10	02/22/2023	14:30	3	Groundwater		BD04095	☑
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Relinquished By	Received By	Date/Time
		02/22/2023 16:30
		02/23/2023 08:38

SmarTroll ID	7586-41445-5-4	Cooler Temp	N/A
Turbidity ID	4677-23343-4-2	Thermometer ID	N/A
Sample Event	1399	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

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	Gorgas Landfill

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-14
Changed collection time from 1510 to 1435 on EB-1 per sample container. BC 02/23/23

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id	pH Check
MW-13	02/20/2023	11:02	1	Groundwater		BD04096	☑
MW-14	02/20/2023	12:02	3	Groundwater		BD04097	☑
MW-15	02/20/2023	13:17	1	Groundwater		BD04098	☑
MW-16	02/20/2023	14:45	1	Groundwater		BD04099	☑
MW-16 dup	02/20/2023	14:45	1	Sample Duplicate		BD04100	☑
FB-1	02/20/2023	15:10	1	Field Blank		BD04101	☑
MW-17R	02/21/2023	10:38	1	Groundwater		BD04102	☑
MW-18	02/21/2023	11:40	1	Groundwater		BD04103	☑
MW-19	02/21/2023	12:46	1	Groundwater		BD04104	☑
MW-19 dup	02/21/2023	12:46	1	Sample Duplicate		BD04105	☑
MW-20	02/21/2023	14:00	1	Groundwater		BD04106	☑
EB-1	02/21/2023	14:35	1	Equipment Blank		BD04107	☑
MW-11	02/21/2023	15:25	1	Groundwater		BD04108	☑
MW-12V	02/22/2023	12:35	1	Groundwater		BD04109	☑
MW-12	02/22/2023	13:47	1	Groundwater		BD04110	☑
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Relinquished By	Received By	Date/Time
		02/23/2023 08:37

SmarTroll ID	7586-41443-5-2	Cooler Temp	N/A
Turbidity ID	9901-57263-1-1	Thermometer ID	N/A
Sample Event	1399	pH Strip ID	10429-60252-10-8

Bottles/Pre-Preserved Bottles are provided by the GTL

Total Metals and Alkalinity are not performed on Dissolved Sets

Dissolved Metals and Alkalinity are not performed on blanks i.e. Field Blanks or Equipment Blanks

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

April 18, 2023

Brooke Caton
Alabama Power
744 Highway 87
Calera, AL 35040

RE: Project: WMWGORLF_1399
Pace Project No.: 30566801

Dear Brooke Caton:

Enclosed are the analytical results for sample(s) received by the laboratory on March 02, 2023. 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 April 17, 2023 report. This project was revised on April 18, 2023 to add Rad QC sheets to the report.

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: WMWGORLF_1399
Pace Project No.: 30566801

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: WMWGORLF_1399
Pace Project No.: 30566801

Lab ID	Sample ID	Matrix	Date Collected	Date Received
30566801001	**BD04090 MW-5**	Water	02/21/23 12:22	03/02/23 11:00
30566801002	**BD04091 MW-7**	Water	02/21/23 14:25	03/02/23 11:00
30566801003	**BD04092 MW-8**	Water	02/21/23 15:40	03/02/23 11:00
30566801004	**BD04093 MW-6**	Water	02/22/23 13:20	03/02/23 11:00
30566801005	**BD04094 FB-2**	Water	02/22/23 14:10	03/02/23 11:00
30566801006	**BD04095 MW-10**	Water	02/22/23 14:30	03/02/23 11:00
30566801007	**BD04095 MW-10 MS**	Water	02/22/23 14:30	03/02/23 11:00
30566801008	**BD04095 MW-10 MSD**	Water	02/22/23 14:30	03/02/23 11:00
30566801009	**BD04096 MW-13**	Water	02/20/23 11:02	03/02/23 11:00
30566801010	**BD04097 MW-14**	Water	02/20/23 12:02	03/02/23 11:00
30566801011	**BD04097 MW-14 MS**	Water	02/20/23 12:02	03/02/23 11:00
30566801012	**BD04097 MW-14 MSD**	Water	02/20/23 12:02	03/02/23 11:00
30566801013	**BD04098 MW-15**	Water	02/20/23 13:17	03/02/23 11:00
30566801014	**BD04099 MW-16**	Water	02/20/23 14:45	03/02/23 11:00
30566801015	**BD04100 MW-16 Dup**	Water	02/20/23 14:45	03/02/23 11:00
30566801016	**BD04101 FB-1**	Water	02/20/23 15:10	03/02/23 11:00
30566801017	**BD04102 MW-17R**	Water	02/21/23 10:38	03/02/23 11:00
30566801018	**BD04103 MW-18**	Water	02/21/23 11:40	03/02/23 11:00
30566801019	**BD04104 MW-19**	Water	02/21/23 12:46	03/02/23 11:00
30566801020	**BD04105 MW-19 Dup**	Water	02/21/23 12:46	03/02/23 11:00
30566801021	**BD04106 MW-20**	Water	02/21/23 14:00	03/02/23 11:00
30566801022	**BD04107 EB-1**	Water	02/21/23 14:35	03/02/23 11:00
30566801023	**BD04108 MW-11**	Water	02/21/23 15:25	03/02/23 11:00
30566801024	**BD04109 MW-12V**	Water	02/22/23 12:35	03/02/23 11:00
30566801025	**BD04110 MW-12**	Water	02/22/23 13:47	03/02/23 11:00

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WMWGORLF_1399
Pace Project No.: 30566801

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30566801001	BD04090 MW-5	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801002	BD04091 MW-7	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801003	BD04092 MW-8	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801004	BD04093 MW-6	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801005	BD04094 FB-2	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801006	BD04095 MW-10	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801007	BD04095 MW-10 MS	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30566801008	BD04095 MW-10 MSD	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30566801009	BD04096 MW-13	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801010	BD04097 MW-14	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801011	BD04097 MW-14 MS	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30566801012	BD04097 MW-14 MSD	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
30566801013	BD04098 MW-15	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801014	BD04099 MW-16	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA

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SAMPLE ANALYTE COUNT

Project: WMWGORLF_1399
Pace Project No.: 30566801

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		Total Radium Calculation	JAL	1	PASI-PA
30566801015	**BD04100 MW-16 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801016	**BD04101 FB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801017	**BD04102 MW-17R**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801018	**BD04103 MW-18**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801019	**BD04104 MW-19**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801020	**BD04105 MW-19 Dup**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801021	**BD04106 MW-20**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801022	**BD04107 EB-1**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801023	**BD04108 MW-11**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801024	**BD04109 MW-12V**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA
30566801025	**BD04110 MW-12**	EPA 9315	SLC	1	PASI-PA
		EPA 9320	JJS1	1	PASI-PA
		Total Radium Calculation	JAL	1	PASI-PA

PASI-PA = Pace Analytical Services - Greensburg

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: WMWGORLF_1399
Pace Project No.: 30566801

Method: **EPA 9315**
Description: 9315 Total Radium
Client: Alabama Power
Date: April 18, 2023

General Information:
25 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:

Pace Analytical Services, LLC
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PROJECT NARRATIVE

Project: WMWGORLF_1399
Pace Project No.: 30566801

Method: **EPA 9320**
Description: 9320 Radium 228
Client: Alabama Power
Date: April 18, 2023

General Information:
25 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: WMWGORLF_1399
Pace Project No.: 30566801

Method: **Total Radium Calculation**
Description: Total Radium 228+226
Client: Alabama Power
Date: April 18, 2023

General Information:
21 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: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04090 MW-5 **Lab ID: 30566801001** Collected: 02/21/23 12:22 Received: 03/02/23 11:00 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 ± 0.138 (0.230) C:97% T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0909U ± 0.313 (0.709) C:79% T:88%**	pCi/L	03/10/23 16:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.275U ± 0.451 (0.939)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04091 MW-7 **Lab ID: 30566801002** Collected: 02/21/23 14:25 Received: 03/02/23 11:00 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	**0.108U ± 0.156 (0.339) C:99% T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.681U ± 0.402 (0.732) C:80% T:79%**	pCi/L	03/10/23 16:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.789U ± 0.558 (1.07)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04092 MW-8 **Lab ID: 30566801003** Collected: 02/21/23 15:40 Received: 03/02/23 11:00 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	**0.0337U ± 0.0976 (0.240) C:97% T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**2.16 ± 0.607 (0.678) C:78% T:96%**	pCi/L	03/10/23 16:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**2.19 ± 0.705 (0.918)**	pCi/L	03/30/23 14:59	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04093 MW-6 **Lab ID: 30566801004** Collected: 02/22/23 13:20 Received: 03/02/23 11:00 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	**0.250U ± 0.167 (0.263) C:98% T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**3.50 ± 0.841 (0.673) C:78% T:89%**	pCi/L	03/10/23 16:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**3.75 ± 1.01 (0.936)**	pCi/L	03/30/23 14:59	7440-14-4	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04094 FB-2 **Lab ID: 30566801005** Collected: 02/22/23 14:10 Received: 03/02/23 11:00 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	**0.0570U ± 0.132 (0.312) C:95% T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.57 ± 0.509 (0.654) C:78% T:91%**	pCi/L	03/10/23 16:05	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.63 ± 0.641 (0.966)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04095 MW-10 **Lab ID: 30566801006** Collected: 02/22/23 14:30 Received: 03/02/23 11:00 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	**0.0867U ± 0.126 (0.273) C:91% T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.717 ± 0.378 (0.667) C:78% T:92%**	pCi/L	03/10/23 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.804U ± 0.504 (0.940)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04095 MW-10 MS **Lab ID: 30566801007** Collected: 02/22/23 14:30 Received: 03/02/23 11:00 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	**97.53 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**77.04 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/10/23 16:06	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04095 MW-10 MSD **Lab ID: 30566801008** Collected: 02/22/23 14:30 Received: 03/02/23 11:00 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	**104.24 %REC 6.66RPD ± NA (NA) C:NA T:NA**	pCi/L	03/29/23 20:49	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**86.03 %REC 11.02RPD ± NA (NA) C:NA T:NA**	pCi/L	03/10/23 16:06	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04096 MW-13 **Lab ID: 30566801009** Collected: 02/20/23 11:02 Received: 03/02/23 11:00 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	**0.138U ± 0.166 (0.349) C:96% T:NA**	pCi/L	03/29/23 20:11	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**1.09 ± 0.450 (0.703) C:75% T:88%**	pCi/L	03/10/23 16:06	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.23 ± 0.616 (1.05)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04097 MW-14 **Lab ID: 30566801010** Collected: 02/20/23 12:02 Received: 03/02/23 11:00 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	**-0.0892U ± 0.0623 (0.287) C:95% T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.625 ± 0.332 (0.577) C:80% T:89%**	pCi/L	03/13/23 13:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.625U ± 0.394 (0.864)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04097 MW-14 MS **Lab ID: 30566801011** Collected: 02/20/23 12:02 Received: 03/02/23 11:00 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	**88.31 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**80.65 %REC ± NA (NA) C:NA T:NA**	pCi/L	03/13/23 13:13	15262-20-1	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04097 MW-14 MSD **Lab ID: 30566801012** Collected: 02/20/23 12:02 Received: 03/02/23 11:00 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	**103.42 %REC 15.76RPD ± NA (NA) C:NA T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**65.1 %REC 21.34RPD ± NA (NA) C:NA T:NA**	pCi/L	03/13/23 13:13	15262-20-1	

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04098 MW-15 **Lab ID: 30566801013** Collected: 02/20/23 13:17 Received: 03/02/23 11:00 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	**0.0764U ± 0.131 (0.296) C:99% T:NA**	pCi/L	03/29/23 20:10	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.739 ± 0.392 (0.693) C:75% T:94%**	pCi/L	03/10/23 16:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.815U ± 0.523 (0.989)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04099 MW-16 **Lab ID: 30566801014** Collected: 02/20/23 14:45 Received: 03/02/23 11:00 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	**0.0563U ± 0.0906 (0.198) C:98% T:NA**	pCi/L	03/29/23 19:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.164U ± 0.336 (0.742) C:73% T:92%**	pCi/L	03/10/23 16:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.220U ± 0.427 (0.940)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04100 MW-16 Dup **Lab ID: 30566801015** Collected: 02/20/23 14:45 Received: 03/02/23 11:00 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	**0.155U ± 0.132 (0.232) C:99% T:NA**	pCi/L	03/29/23 20:21	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.344U ± 0.329 (0.668) C:80% T:89%**	pCi/L	03/10/23 16:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.499U ± 0.461 (0.900)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, LLC
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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04101 FB-1 **Lab ID: 30566801016** Collected: 02/20/23 15:10 Received: 03/02/23 11:00 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	**0.0664U ± 0.124 (0.283) C:99% T:NA**	pCi/L	03/29/23 21:36	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.285U ± 0.301 (0.621) C:78% T:92%**	pCi/L	03/10/23 16:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.351U ± 0.425 (0.904)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04102 MW-17R **Lab ID: 30566801017** Collected: 02/21/23 10:38 Received: 03/02/23 11:00 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	**0.121U ± 0.141 (0.286) C:99% T:NA**	pCi/L	03/29/23 21:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.286U ± 0.283 (0.581) C:76% T:107%**	pCi/L	03/10/23 16:08	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.407U ± 0.424 (0.867)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04103 MW-18 **Lab ID: 30566801018** Collected: 02/21/23 11:40 Received: 03/02/23 11:00 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	**0.187U ± 0.164 (0.299) C:98% T:NA**	pCi/L	03/29/23 21:35	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.416U ± 0.341 (0.671) C:72% T:90%**	pCi/L	03/10/23 16:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.603U ± 0.505 (0.970)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04104 MW-19 **Lab ID: 30566801019** Collected: 02/21/23 12:46 Received: 03/02/23 11:00 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	**-0.0227U ± 0.0771 (0.248) C:100% T:NA**	pCi/L	03/29/23 20:23	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.535U ± 0.342 (0.631) C:76% T:90%**	pCi/L	03/10/23 16:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.535U ± 0.419 (0.879)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04105 MW-19 Dup **Lab ID: 30566801020** Collected: 02/21/23 12:46 Received: 03/02/23 11:00 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	**0.181U ± 0.151 (0.263) C:95% T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.319U ± 0.330 (0.679) C:75% T:87%**	pCi/L	03/10/23 16:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.500U ± 0.481 (0.942)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04106 MW-20 **Lab ID: 30566801021** Collected: 02/21/23 14:00 Received: 03/02/23 11:00 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	**0.328 ± 0.205 (0.312) C:97% T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.830 ± 0.395 (0.669) C:77% T:98%**	pCi/L	03/10/23 16:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.16 ± 0.600 (0.981)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04107 EB-1 **Lab ID: 30566801022** Collected: 02/21/23 14:35 Received: 03/02/23 11:00 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	**0.167U ± 0.140 (0.247) C:98% T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.0881U ± 0.345 (0.783) C:75% T:88%**	pCi/L	03/10/23 16:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.255U ± 0.485 (1.03)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04108 MW-11 **Lab ID: 30566801023** Collected: 02/21/23 15:25 Received: 03/02/23 11:00 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	**0.280U ± 0.194 (0.324) C:91% T:NA**	pCi/L	03/30/23 09:42	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.419U ± 0.402 (0.823) C:72% T:87%**	pCi/L	03/10/23 16:11	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.699U ± 0.596 (1.15)**	pCi/L	03/30/23 14:59	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04109 MW-12V **Lab ID: 30566801024** Collected: 02/22/23 12:35 Received: 03/02/23 11:00 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	**0.139U ± 0.169 (0.354) C:97% T:NA**	pCi/L	03/30/23 08:33	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.643 ± 0.329 (0.571) C:82% T:94%**	pCi/L	03/13/23 13:13	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**0.782U ± 0.498 (0.925)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

Sample: BD04110 MW-12 **Lab ID: 30566801025** Collected: 02/22/23 13:47 Received: 03/02/23 11:00 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	**0.186U ± 0.158 (0.291) C:98% T:NA**	pCi/L	03/30/23 08:29	13982-63-3	
	Pace Analytical Services - Greensburg					
Radium-228	EPA 9320	**0.864 ± 0.387 (0.619) C:79% T:92%**	pCi/L	03/13/23 17:07	15262-20-1	
	Pace Analytical Services - Greensburg					
Total Radium	Total Radium Calculation	**1.05 ± 0.545 (0.910)**	pCi/L	03/30/23 15:00	7440-14-4	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

QC Batch: 571662
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30566801010, 30566801011, 30566801012, 30566801024, 30566801025

METHOD BLANK: 2775793 Matrix: Water
Associated Lab Samples: 30566801010, 30566801011, 30566801012, 30566801024, 30566801025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	0.0310 ± 0.0800 (0.192) C:94% T:NA	pCi/L	03/30/23 09:42	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

QC Batch: 571663 Analysis Method: EPA 9320
QC Batch Method: EPA 9320 Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30566801010, 30566801011, 30566801012, 30566801024, 30566801025

METHOD BLANK: 2775794 Matrix: Water
Associated Lab Samples: 30566801010, 30566801011, 30566801012, 30566801024, 30566801025

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	-0.0779 ± 0.273 (0.657) C:80% T:89%	pCi/L	03/13/23 13:13	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

QC Batch: 571658
QC Batch Method: EPA 9315
Analysis Method: EPA 9315
Analysis Description: 9315 Total Radium
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30566801001, 30566801002, 30566801003, 30566801004, 30566801005, 30566801006, 30566801007, 30566801008, 30566801009, 30566801013, 30566801014, 30566801015, 30566801016, 30566801017, 30566801018, 30566801019, 30566801020, 30566801021, 30566801022, 30566801023

METHOD BLANK: 2775780
Matrix: Water
Associated Lab Samples: 30566801001, 30566801002, 30566801003, 30566801004, 30566801005, 30566801006, 30566801007, 30566801008, 30566801009, 30566801013, 30566801014, 30566801015, 30566801016, 30566801017, 30566801018, 30566801019, 30566801020, 30566801021, 30566801022, 30566801023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-226	-0.0242 ± 0.0393 (0.143) C:100% T:NA	pCi/L	03/29/23 20:49	

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QUALITY CONTROL - RADIOCHEMISTRY

Project: WMWGORLF_1399
Pace Project No.: 30566801

QC Batch: 571660
QC Batch Method: EPA 9320
Analysis Method: EPA 9320
Analysis Description: 9320 Radium 228
Laboratory: Pace Analytical Services - Greensburg
Associated Lab Samples: 30566801001, 30566801002, 30566801003, 30566801004, 30566801005, 30566801006, 30566801007, 30566801008, 30566801009, 30566801013, 30566801014, 30566801015, 30566801016, 30566801017, 30566801018, 30566801019, 30566801020, 30566801021, 30566801022, 30566801023

METHOD BLANK: 2775784
Matrix: Water
Associated Lab Samples: 30566801001, 30566801002, 30566801003, 30566801004, 30566801005, 30566801006, 30566801007, 30566801008, 30566801009, 30566801013, 30566801014, 30566801015, 30566801016, 30566801017, 30566801018, 30566801019, 30566801020, 30566801021, 30566801022, 30566801023

Parameter	Act ± Unc (MDC) Carr Trac	Units	Analyzed	Qualifiers
Radium-228	0.369 ± 0.302 (0.596) C:79% T:94%	pCi/L	03/10/23 16:05	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WMWGORLF_1399
Pace Project No.: 30566801

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.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORLF_1399
Pace Project No.: 30566801

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30566801001	BD04090 MW-5	EPA 9315	571658		
30566801002	BD04091 MW-7	EPA 9315	571658		
30566801003	BD04092 MW-8	EPA 9315	571658		
30566801004	BD04093 MW-6	EPA 9315	571658		
30566801005	BD04094 FB-2	EPA 9315	571658		
30566801006	BD04095 MW-10	EPA 9315	571658		
30566801007	BD04095 MW-10 MS	EPA 9315	571658		
30566801008	BD04095 MW-10 MSD	EPA 9315	571658		
30566801009	BD04096 MW-13	EPA 9315	571658		
30566801010	BD04097 MW-14	EPA 9315	571662		
30566801011	BD04097 MW-14 MS	EPA 9315	571662		
30566801012	BD04097 MW-14 MSD	EPA 9315	571662		
30566801013	BD04098 MW-15	EPA 9315	571658		
30566801014	BD04099 MW-16	EPA 9315	571658		
30566801015	BD04100 MW-16 Dup	EPA 9315	571658		
30566801016	BD04101 FB-1	EPA 9315	571658		
30566801017	BD04102 MW-17R	EPA 9315	571658		
30566801018	BD04103 MW-18	EPA 9315	571658		
30566801019	BD04104 MW-19	EPA 9315	571658		
30566801020	BD04105 MW-19 Dup	EPA 9315	571658		
30566801021	BD04106 MW-20	EPA 9315	571658		
30566801022	BD04107 EB-1	EPA 9315	571658		
30566801023	BD04108 MW-11	EPA 9315	571658		
30566801024	BD04109 MW-12V	EPA 9315	571662		
30566801025	BD04110 MW-12	EPA 9315	571662		
30566801001	BD04090 MW-5	EPA 9320	571660		
30566801002	BD04091 MW-7	EPA 9320	571660		
30566801003	BD04092 MW-8	EPA 9320	571660		
30566801004	BD04093 MW-6	EPA 9320	571660		
30566801005	BD04094 FB-2	EPA 9320	571660		
30566801006	BD04095 MW-10	EPA 9320	571660		
30566801007	BD04095 MW-10 MS	EPA 9320	571660		
30566801008	BD04095 MW-10 MSD	EPA 9320	571660		
30566801009	BD04096 MW-13	EPA 9320	571660		
30566801010	BD04097 MW-14	EPA 9320	571663		
30566801011	BD04097 MW-14 MS	EPA 9320	571663		
30566801012	BD04097 MW-14 MSD	EPA 9320	571663		
30566801013	BD04098 MW-15	EPA 9320	571660		
30566801014	BD04099 MW-16	EPA 9320	571660		
30566801015	BD04100 MW-16 Dup	EPA 9320	571660		
30566801016	BD04101 FB-1	EPA 9320	571660		
30566801017	BD04102 MW-17R	EPA 9320	571660		
30566801018	BD04103 MW-18	EPA 9320	571660		
30566801019	BD04104 MW-19	EPA 9320	571660		
30566801020	BD04105 MW-19 Dup	EPA 9320	571660		
30566801021	BD04106 MW-20	EPA 9320	571660		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WMWGORLF_1399
Pace Project No.: 30566801

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30566801022	**BD04107 EB-1**	EPA 9320	571660		
30566801023	**BD04108 MW-11**	EPA 9320	571660		
30566801024	**BD04109 MW-12V**	EPA 9320	571663		
30566801025	**BD04110 MW-12**	EPA 9320	571663		
30566801001	**BD04090 MW-5**	Total Radium Calculation	577499		
30566801002	**BD04091 MW-7**	Total Radium Calculation	577499		
30566801003	**BD04092 MW-8**	Total Radium Calculation	577499		
30566801004	**BD04093 MW-6**	Total Radium Calculation	577499		
30566801005	**BD04094 FB-2**	Total Radium Calculation	577499		
30566801006	**BD04095 MW-10**	Total Radium Calculation	577499		
30566801009	**BD04096 MW-13**	Total Radium Calculation	577499		
30566801010	**BD04097 MW-14**	Total Radium Calculation	577500		
30566801013	**BD04098 MW-15**	Total Radium Calculation	577499		
30566801014	**BD04099 MW-16**	Total Radium Calculation	577499		
30566801015	**BD04100 MW-16 Dup**	Total Radium Calculation	577499		
30566801016	**BD04101 FB-1**	Total Radium Calculation	577499		
30566801017	**BD04102 MW-17R**	Total Radium Calculation	577499		
30566801018	**BD04103 MW-18**	Total Radium Calculation	577499		
30566801019	**BD04104 MW-19**	Total Radium Calculation	577499		
30566801020	**BD04105 MW-19 Dup**	Total Radium Calculation	577499		
30566801021	**BD04106 MW-20**	Total Radium Calculation	577499		
30566801022	**BD04107 EB-1**	Total Radium Calculation	577499		
30566801023	**BD04108 MW-11**	Total Radium Calculation	577499		
30566801024	**BD04109 MW-12V**	Total Radium Calculation	577500		
30566801025	**BD04110 MW-12**	Total Radium Calculation	577500		

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 Calera, AL 35040	Copy To:	Renee Jernigan & Blaine Denton	Company Name:	Alabama Power Co.
				Address:	744 Highway 87 GSC Bldg #8
Email To:	tbwill@southernco.com	Purchase Order #:	APC10755638	Pace Quote:	CCR
Phone:	205-664-6247 Fax:	Project Name:	Plant Gorgas CCB Landfills	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORLF_1399	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_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	Preservatives: NaOH+ZnAcetate	Preservatives: HNO3	Preservatives:	Preservatives:	Analyses Test Y/N	EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide		Residual Chlorine (Y/N)	
1	BD04090	MW-5	APCO-GS-CCB-MW-5	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	12:22	1			X				X	X	X				001
2	BD04091	MW-7	APCO-GS-CCB-MW-7	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	14:25	1			X				X	X	X				002
3	BD04092	MW-8	APCO-GS-CCB-MW-8	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	15:40	1			X				X	X	X				003
4	BD04093	MW-6	APCO-GS-CCB-MW-6	APCO_Gorgas_CCBLandfills				GW	G	2/22/2023	13:20	1			X				X	X	X				004
5	BD04094	FB-2	APCO-GS-CCB-FB-02	APCO_Gorgas_CCBLandfills				GW	G	2/22/2023	14:10	1			X				X	X	X				005
6	BD04095	MW-10	APCO-GS-CCB-MW-10	APCO_Gorgas_CCBLandfills		x		GW	G	2/22/2023	14:30	3			X				X	X	X				006,007,008
7	BD04096	MW-13	APCO-GS-CCB-MW-13	APCO_Gorgas_CCBLandfills				GW	G	2/20/2023	11:02	1			X				X	X	X				009
8	BD04097	MW-14	APCO-GS-CCB-MW-14	APCO_Gorgas_CCBLandfills		x		GW	G	2/20/2023	12:02	3			X				X	X	X				010,011,012
9	BD04098	MW-15	APCO-GS-CCB-MW-15	APCO_Gorgas_CCBLandfills				GW	G	2/20/2023	13:17	1			X				X	X	X				013
10	BD04099	MW-16	APCO-GS-CCB-MW-16	APCO_Gorgas_CCBLandfills				GW	G	2/20/2023	14:45	1			X				X	X	X				014
11	BD04100	MW-16 Dup	APCO-GS-CCB-MW-16	APCO_Gorgas_CCBLandfills	x			GW	G	2/20/2023	14:45	1			X				X	X	X				015
12	BD04101	FB-1	APCO-GS-CCB-FB-01	APCO_Gorgas_CCBLandfills				GW	G	2/20/2023	15:10	1			X				X	X	X				016

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	2/24/2023	9:46	[signature] 3-2-23	3-2-23		
					3-2-23	11:00	

WO# : 30566801

30566801

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)

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 Gorgas CCB Landfills	Pace Project Manager:	Skyler Richmond
Requested Due Date:	Normal	Project Number:	WMWGORLF_1399	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_Code	Site Name Facility_ID	Sample Duplicate	Matrix Spike/Matrix Spike Duplicate	Field Filtered	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	# OF CONTAINERS	Preservatives: Unpreserved	NaOH+ZnAcetate	HNO3	Y/N	Analyses Test: EPA 9315	EPA 9320	Total Radium Sum	Total Sulfide	Residual Chlorine (Y/N)	
1	BD04102	MW-17R	APCO-GS-CCB-MW-17R	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	10:38	1			X		X	X	X			017
2	BD04103	MW-18	APCO-GS-CCB-MW-18	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	11:40	1			X		X	X	X			018
3	BD04104	MW-19	APCO-GS-CCB-MW-19	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	12:46	1			X		X	X	X			019
4	BD04105	MW-19 Dup	APCO-GS-CCB-MW-19	APCO_Gorgas_CCBLandfills	x			GW	G	2/21/2023	12:46	1			X		X	X	X			020
5	BD04106	MW-20	APCO-GS-CCB-MW-20	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	14:00	1			X		X	X	X			021
6	BD04107	EB-1	APCO-GS-CCB-EB-01	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	14:35	1			X		X	X	X			022
7	BD04108	MW-11	APCO-GS-CCB-MW-11	APCO_Gorgas_CCBLandfills				GW	G	2/21/2023	15:25	1			X		X	X	X			023
8	BD04109	MW-12V	APCO-GS-CCB-MW-12V	APCO_Gorgas_CCBLandfills				GW	G	2/22/2023	12:35	1			X		X	X	X			024
9	BD04110	MW-12	APCO-GS-CCB-MW-12	APCO_Gorgas_CCBLandfills				GW	G	2/22/2023	13:47	1			X		X	X	X			025
10																						
11																						
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Brooke Caton/ APC GTL	2/24/2023	9:46		3-2-23	11:00	

WO# : 30566801

PM: SCR Due Date: 03/30/23

CLIENT: ALABAMA PWR

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)

DC#_Title: ENV-FRM-GBUR-0088 v04_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 02/03/2023

WO#: 30566801

PM: SCR Due Date: 03/30/23

CLIENT: ALABAMA PWR

Client Name: Alabama Power Company

Courier: ☑ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 615402546805

Examined By	TH
Labeled By	TH
Temped By	—

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	NA	pH paper Lot# 100722 / D.P.D. Residual Chlorine Lot # —
Chain of Custody Present	✓			1.
Chain of Custody Filled Out:	✓			2.
-Were client corrections present on COC		✓		
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 samples field filtered:			✓	13.
Organic Samples checked for dechlorination			✓	14:
Filtered volume received for dissolved tests:			✓	15:
All containers checked for preservation: exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix	✓			16. PHC2
All containers meet method preservation requirements:	✓			Initial when completed TH / Date/Time of Preservation / Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			✓	17.
624.1: Headspace in VOA Vials (0mm)			✓	18.
Trip Blank Present:			✓	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	✓			Initial when completed TH / Date: 3/7/23 / Survey Meter SN: 1565

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Client _____ Profile Number 16788

Site Plant Gorgas CCB Landfills Page 1 of 3 Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
1	SL																												
2																													
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12	↓						↓																						

WO# : 30566801

PM: SCR Due Date: 03/30/23

CLIENT: ALABAMA PWR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Qualtrax ID: 55678

Client _____ Profile Number 16788

Site Plant Gorgas CCB Landfills Page 2 of 3 Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
13	WT						1																						
14																													
15																													
16																													
17																													
18																													
19																													
20																													
21																													
22																													
23																													
24																													

WO#: 30566801
PM: SCR Due Date: 03/30/23
CLIENT: ALABAMA PWR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Client _____ Profile Number 16788

Site Plant Gorgas CCB Landfill Page 3 of 3 Notes _____

		Amber Glass					Plastic								Vials					Other									
Sample Line Item	Matrix	AG1H	AG3S	AG3U	AG5U	AG5T	BP1N	BP1U	BP2S	BP2U	BP3C	BP3N	BP3S	BP3U	DG9S	VG9H	VG9T	VG9U	VOAK	WGFU	WGKU	ZPLC	GCUB	GJN	12GN	GN	BG1U		
25	WT						1																						

WO# : 30566801

PM: SCR Due Date: 03/30/23

CLIENT: ALABAMA PWR

Container Codes

Glass

GJN	1 Gallon Jug with HNO3	DG9S	40mL amber VOA vial H2SO4
AG5U	100mL amber glass unpreserved	VG9U	40mL clear VOA vial
AG5T	100mL amber glass Na Thiosulfate	VG9T	40mL clear VOA vial Na Thiosulfate
GJN	1 Gallon Jug	VG9H	40mL clear VOA vial HCl
AG1S	1L amber glass H2SO4	JGFU	4oz amber wide jar
AG1H	1L amber glass HCl	WGFU	4oz wide jar unpreserved
AG1T	1L amber glass NA Thiosulfate	BG2U	500mL clear glass unpreserved
BG1U	1L clear glass unpreserved	AG2U	500mL amber glass unpreserved
AG3S	250mL amber glass H2SO4	WGKU	8oz wide jar unpreserved
AG3U	250mL amber glass unpreserved	GN	General

Plastic/Misc.

GCUB	1 gallon cubitainer
12GN	1/2 gallon cubitainer
SP5T	120mL coliform Na Thiosulfate
BP1N	1L plastic HNO3
BP1U	1L plastic unpreserved
BP3S	250mL plastic H2SO4
BP3N	250mL plastic HNO3
BP3U	250mL plastic unpreserved
BP3C	250mL plastic NAOH
BP2S	500mL plastic H2SO4
BP2U	500mL plastic unpreserved

EZI	5g Encore
VOAK	Kit Volatile Solid
I	Wipe/Swab
ZPLC	Siploc Bag

WT	Water
SL	Solid
OL	Non-Aq Liquid
WP	Wipe

Quality Control Sample Performance Assessment

Pace Analytical™ www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	3/7/2023
Worklist:	71855
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2775794
MB concentration:	-0.078
M/B 2 Sigma CSU:	0.273
MB MDC:	0.657
MB Numerical Performance Indicator:	-0.56
MB Status vs Numerical Indicator:	Pass
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71855	LCSD71855
Count Date:	3/13/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	33.255	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.801	
Target Conc. (pCi/L, g, F):	4.151	
Uncertainty (Calculated):	0.203	
Result (pCi/L, g, F):	4.630	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.057	
Numerical Performance Indicator:	0.87	
Percent Recovery:	111.54%	
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:	2/20/2023	2/21/2023
Sample I.D.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Spike I.D.:	22-040	22-040
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.489	33.489
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):	0.802	0.805
MS Target Conc.(pCi/L, g, F):	8.356	8.318
MSD Aliquot (L, g, F):	0.801	0.801
MSD Target Conc. (pCi/L, g, F):	8.359	8.363
MS Spike Uncertainty (calculated):	0.409	0.408
MSD Spike Uncertainty (calculated):	0.410	0.410
Sample Result:	0.625	0.272
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.332	0.335
Sample Matrix Spike Result:	7.364	7.217
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.499	1.484
Sample Matrix Spike Duplicate Result:	6.067	8.153
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.264	1.657
MS Numerical Performance Indicator:	-1.994	-1.709
MSD Numerical Performance Indicator:	-4.174	-0.543
MS Percent Recovery:	80.65%	83.50%
MSD Percent Recovery:	65.10%	94.24%
MS Status vs Numerical Indicator:	Pass	Pass
MSD Status vs Numerical Indicator:	Fail****	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		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.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Sample Matrix Spike Result:	7.364	7.217
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.499	1.484
Sample Matrix Spike Duplicate Result:	6.067	8.153
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.264	1.657
Duplicate Numerical Performance Indicator:	1.296	-0.825
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	21.34%	12.09%
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:

VAL
3/14/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/6/2023
Worklist:	71852
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2775780
MB concentration:	-0.024
M/B Counting Uncertainty:	0.039
MB MDC:	0.143
MB Numerical Performance Indicator:	-1.21
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	Y
	LCS71852	LCSD71852
Count Date:	3/30/2023	3/30/2023
Spike I.D.:	19-033	19-033
Decay Corrected Spike Concentration (pCi/mL):	24.018	24.018
Volume Used (mL):	0.10	0.10
Aliquot Volume (L, g, F):	0.500	0.501
Target Conc. (pCi/L, g, F):	4.800	4.792
Uncertainty (Calculated):	0.058	0.058
Result (pCi/L, g, F):	4.635	4.831
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.453	0.457
Numerical Performance Indicator:	-0.71	0.17
Percent Recovery:	96.56%	100.81%
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:	2/22/2023	
Sample I.D.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Spike I.D.:	19-033	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	
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):	15.572	
MSD Aliquot (L, g, F):	0.275	
MSD Target Conc. (pCi/L, g, F):	17.464	
MS Spike Uncertainty (calculated):	0.187	
MSD Spike Uncertainty (calculated):	0.210	
Sample Result:	0.087	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.126	
Sample Matrix Spike Result:	15.273	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.022	
Sample Matrix Spike Duplicate Result:	18.292	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.183	
MS Numerical Performance Indicator:	-0.721	
MSD Numerical Performance Indicator:	1.203	
MS Percent Recovery:	97.53%	
MSD Percent Recovery:	104.24%	
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.:	LCS71852	
Duplicate Sample I.D.	LCSD71852	
Sample Result (pCi/L, g, F):	4.635	
Sample Result Counting Uncertainty (pCi/L, g, F):	0.453	
Sample Duplicate Result (pCi/L, g, F):	4.831	
Sample Duplicate Result Counting Uncertainty (pCi/L, g, F):	0.457	
Are sample and/or duplicate results below RL?	NO	
Duplicate Numerical Performance Indicator:	-0.597	
(Based on the LCS/LCSD Percent Recoveries) Duplicate RPD:	4.31%	
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.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Sample Matrix Spike Result:	15.273	
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.022	
Sample Matrix Spike Duplicate Result:	18.292	
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.183	
Duplicate Numerical Performance Indicator:	-3.785	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	6.66%	
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:

SLC 3/30/23

TJL 3/30/23

Quality Control Sample Performance Assessment

Pace Analytical™
www.pacelabs.com

Test:	Ra-228
Analyst:	JJS1
Date:	3/8/2023
Worklist:	71853
Matrix:	WT

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2775784
MB concentration:	0.369
M/B 2 Sigma CSU:	0.302
MB MDC:	0.596
MB Numerical Performance Indicator:	2.40
MB Status vs Numerical Indicator:	Warning
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71853	LCSD71853
Count Date:	3/10/2023	
Spike I.D.:	22-040	
Decay Corrected Spike Concentration (pCi/mL):	33.289	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.803	
Target Conc. (pCi/L, g, F):	4.147	
Uncertainty (Calculated):	0.203	
Result (pCi/L, g, F):	4.599	
LCS/LCSD 2 Sigma CSU (pCi/L, g, F):	1.066	
Numerical Performance Indicator:	0.82	
Percent Recovery:	110.89%	
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:	2/22/2023	
Sample I.D.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Spike I.D.:	22-040	
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	33.466	
Spike Volume Used in MS (mL):	0.20	
Spike Volume Used in MSD (mL):	0.20	
MS Aliquot (L, g, F):	0.802	
MS Target Conc.(pCi/L, g, F):	8.348	
MSD Aliquot (L, g, F):	0.801	
MSD Target Conc. (pCi/L, g, F):	8.359	
MS Spike Uncertainty (calculated):	0.409	
MSD Spike Uncertainty (calculated):	0.410	
Sample Result:	0.717	
Sample Result 2 Sigma CSU (pCi/L, g, F):	0.378	
Sample Matrix Spike Result:	7.149	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.505	
Sample Matrix Spike Duplicate Result:	7.908	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.594	
MS Numerical Performance Indicator:	-2.341	
MSD Numerical Performance Indicator:	-1.355	
MS Percent Recovery:	77.04%	
MSD Percent Recovery:	86.03%	
MS Status vs Numerical Indicator:	Warning	
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.	30566801006	
Sample MS I.D.	30566801007	
Sample MSD I.D.	30566801008	
Sample Matrix Spike Result:	7.149	
Matrix Spike Result 2 Sigma CSU (pCi/L, g, F):	1.505	
Sample Matrix Spike Duplicate Result:	7.908	
Matrix Spike Duplicate Result 2 Sigma CSU (pCi/L, g, F):	1.594	
Duplicate Numerical Performance Indicator:	-0.679	
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	11.02%	
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:

VAL
3/13/23

Quality Control Sample Performance Assessment

Pace Analytical
www.pacelabs.com

Test:	Ra-226
Analyst:	SLC
Date:	3/6/2023
Worklist:	71854
Matrix:	DW

Analyst Must Manually Enter All Fields Highlighted in Yellow.

Method Blank Assessment	
MB Sample ID	2775793
MB concentration:	0.031
M/B Counting Uncertainty:	0.080
MB MDC:	0.192
MB Numerical Performance Indicator:	0.76
MB Status vs Numerical Indicator:	N/A
MB Status vs. MDC:	Pass

Laboratory Control Sample Assessment	LCSD (Y or N)?	N
	LCS71854	LCSD71854
Count Date:	3/30/2023	
Spike I.D.:	19-033	
Decay Corrected Spike Concentration (pCi/mL):	24.018	
Volume Used (mL):	0.10	
Aliquot Volume (L, g, F):	0.500	
Target Conc. (pCi/L, g, F):	4.799	
Uncertainty (Calculated):	0.058	
Result (pCi/L, g, F):	4.775	
LCS/LCSD Counting Uncertainty (pCi/L, g, F):	0.460	
Numerical Performance Indicator:	-0.10	
Percent Recovery:	99.50%	
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:	2/20/2023	2/21/2023
Sample I.D.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Spike I.D.:	19-033	19-033
MS/MSD Decay Corrected Spike Concentration (pCi/mL):	24.019	24.019
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):	0.301	0.311
MS Target Conc.(pCi/L, g, F):	15.943	15.428
MSD Aliquot (L, g, F):	0.271	0.297
MSD Target Conc. (pCi/L, g, F):	17.740	16.192
MS Spike Uncertainty (calculated):	0.191	0.185
MSD Spike Uncertainty (calculated):	0.213	0.194
Sample Result:	-0.089	0.028
Sample Result Counting Uncertainty (pCi/L, g, F):	0.061	0.131
Sample Matrix Spike Result:	13.990	13.086
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.010	0.986
Sample Matrix Spike Duplicate Result:	18.258	13.511
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.204	0.991
MS Numerical Performance Indicator:	-3.546	-4.590
MSD Numerical Performance Indicator:	0.972	-5.216
MS Percent Recovery:	88.31%	84.63%
MSD Percent Recovery:	103.42%	83.26%
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.:		
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.	30566801010	30566812005
Sample MS I.D.	30566801011	30566812006
Sample MSD I.D.	30566801012	30566812007
Sample Matrix Spike Result:	13.990	13.086
Matrix Spike Result Counting Uncertainty (pCi/L, g, F):	1.010	0.986
Sample Matrix Spike Duplicate Result:	18.258	13.511
Matrix Spike Duplicate Result Counting Uncertainty (pCi/L, g, F):	1.204	0.991
Duplicate Numerical Performance Indicator:	-5.322	-0.595
(Based on the Percent Recoveries) MS/ MSD Duplicate RPD:	15.76%	1.63%
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:

SLC 3/30/23

Appendix D

Appendix D. Horizontal Groundwater Flow Velocity Calculations

Plant Gorgas Landfills

2023 First-Annual Monitoring Event								
Date of Measurement	**MW-2** h_1 (ft)	**MW-20** 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)
2/20/2023	419.04	314.45	3507.0	0.030	8.01	0.15	1.59	581.28
Date of Measurement	**MW-3** h_1 (ft)	**MW-6** 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)
2/20/2023	419.16	320.13	2970.0	0.033	8.01	0.15	1.78	649.90
Date of Measurement	**MW-14** h_1 (ft)	**MW-19** 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)
2/20/2023	341.59	300.73	1890.0	0.022	8.01	0.15	1.15	421.38

Notes:
ft=feet
ft/d = feet/day
ft/ft = feet per foot
ft/yr = feet per year
ft/yr = feet per year

Appendix E

GROUNDWATER STATS CONSULTING

May 24, 2023

Southern Company Services
Attn: Mr. Greg Dyer
3535 Colonnade Parkway
Birmingham, AL 35243

Re: Plant Gorgas CCR Landfill
1st Semi-Annual Statistical Analysis – February 2023

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 February 2023 1st semi-annual sample event for Alabama Power Company's Plant Gorgas CCR Landfill. The analysis complies with the federal rule for the Disposal of Coal Combustion Residuals (CCR) from Electric Utilities (CCR Rule, 2015) as well as with the United States Environmental Protection Agency (USEPA) Unified Guidance (2009).

Sampling began at this site for the CCR program in 2016. The monitoring well network, as provided by Southern Company Services, consists of the following:

- **Upgradient wells:** MW-1, MW-2, MW-3, and MW-4
- **Downgradient wells:** MW-5, MW-6, MW-7, and MW-8

Data were sent electronically to Groundwater Stats Consulting, and the statistical analysis was prepared according to the Statistical Analysis Plan approved by Dr. Kirk Cameron, PhD Statistician with MacStat Consulting, primary author of the USEPA Unified Guidance, and Senior Advisor to Groundwater Stats Consulting. The analysis was reviewed by Kristina Rayner, Founder and Senior Statistician to Groundwater Stats Consulting.

The CCR program consists of the constituents listed below. The terms "parameters" and "constituents" are used interchangeably.

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): 15
- # Background Samples (Interwell): 108
- # Constituents: 7
- # Downgradient wells: 4

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 boron, calcium, fluoride, sulfate, and TDS
- Interwell prediction limits, combined with a 1-of-2 resample plan for chloride and pH

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. Non-detects are handled as follows:

- 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, 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 data points 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 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.

Background Update Summaries

Fall 2019

Intrawell prediction limits, which compare the most recent compliance sample from a given well to historical data from the same well, are periodically updated by testing for the appropriateness of consolidating new sampling observations with the screened background data. As discussed in the Statistical Analysis Plan (August 2020), intrawell prediction limits are used to evaluate boron, calcium, fluoride, sulfate, and TDS at all wells due to natural spatial variation for these parameters. In September 2019, historical data were evaluated for updating with newer data through May 2019 through the use of time series graphs and Tukey's outlier test to identify potential outliers, when necessary, as well as the Mann Whitney test for equality of medians. This process is described below for the 2021 update and requires a minimum of four new data points. During the 2019 screening, all background data sets for constituents using intrawell prediction limits were updated through May 2019 and a summary of these results was included with the Mann Whitney test section in that report.

Interwell prediction limits are used to compare the most recent sample from each downgradient well to statistical limits constructed from pooled upgradient well data for chloride and pH. As mentioned above, these limits are updated following each sampling event after screening for new outliers in upgradient wells. Data from upgradient wells are also periodically re-screened for newly developing trends, which may require adjustment of the background period to eliminate the trend. No adjustments were required in upgradient wells for constituents evaluated using interwell prediction limits.

Fall 2021

<u>Outlier Analysis</u>

Prior to constructing prediction limits, proposed background data--through February 2021 for constituents evaluated with intrawell prediction limits and through July 2021 for

constituents evaluated with interwell prediction limits--were reviewed through visual screening to identify any newly suspected outliers at all wells for boron, calcium, fluoride, sulfate, and TDS and at upgradient wells for chloride and pH. 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.

High non-detect values for boron in upgradient well MW-4 and downgradient well MW-5, as well as a low non-detect value for fluoride in downgradient well MW-6 were flagged as outliers. Additionally, a low detected value of pH in upgradient well MW-3, high detected values of sulfate at upgradient well MW-1 and downgradient wells MW-7 and MW-8, and a high detected value TDS in upgradient well MW-1 were also flagged as outliers. 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. A list of flagged outliers follows this report (Figure C).

Intrawell – Mann-Whitney Evaluation

For constituents requiring intrawell prediction limits, the Mann-Whitney (Wilcoxon Rank Sum) test was used to compare the medians of historical data through May 2019 to compliance data through February 2021. When no statistically significant difference in medians between the two groups is found at a 99% confidence level, background data may be updated with 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:

Increasing
- Boron: MW-2 (upgradient)

Decreasing
- Fluoride: MW-8

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 the Mann-Whitney test identified a statistically significant increase in median concentrations for boron in well MW-2, the difference resulted from reported non-detect or trace values in the most recent data. The test also identified a statistically significant decrease in the median concentration for fluoride in downgradient well MW-8; however, the magnitude of the decrease was marginal compared to the historical concentrations. Therefore, all background data sets for CCR Appendix III constituents that use intrawell methods were updated. All records will be re-evaluated during the next background update.

Interwell – Trend Test Evaluation

The Sen's Slope/Mann Kendall trend test was used to evaluate the entire record of data through July 2021 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. No statistically significant trends were noted in upgradient wells; therefore, no adjustments were required.

Evaluation of Appendix III Parameters – February 2023

Prediction Limits

Intrawell prediction limits, combined with a 1-of-2 resample plan, were constructed for boron, calcium, fluoride, sulfate, and TDS at each well using screened background data through February 2021 (Figure D). Intrawell limits constructed from 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. This statistical method removes the element of variation across wells and eliminates the chance of mistaking natural spatial variation for a release from the facility. The February 2023 observation is compared to its respective background from the same well to determine whether initial exceedances are present. Note that the reporting limit for boron at wells MW-1, MW-2, and MW-3 increased from 0.05075 mg/L to 0.1015 mg/L, which increased the intrawell prediction limit to the reporting limit. No significant changes occurred as a result of the reporting limit increase.

Interwell prediction limits, combined with a 1-of-2 resample plan, were constructed for chloride and pH (Figure E). Interwell prediction limits pool upgradient well data through February 2023 to establish a background limit for an individual constituent. The February

2023 sample from each downgradient well is compared to the background limit to determine whether initial exceedances are present.

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.

Complete prediction limits results and a summary of exceedances follow this letter (pages 13-16). Exceedances were identified for the following well/constituent pairs:

Intrawell:
- Fluoride: MW-1, MW-2 (both upgradient), MW-6, and MW-7

Interwell:
- Chloride: MW-5, MW-7, and MW-8
- pH: MW-5, MW-7, and MW-8

Trend Test Evaluation – Appendix III

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 at the 99% confidence level (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 (pages 17-18). Statistically significant trends were identified for the following well/constituent pairs:

Increasing
- Fluoride: MW-2 (upgradient)
- pH: MW-2 (upgradient) and MW-8

Decreasing
- Chloride: MW-8
- pH: MW-1 (upgradient)

Evaluation of Appendix IV Parameters – February 2023

Data from upgradient wells for Appendix IV parameters were assessed for outliers during previous analyses. No new outliers were flagged during this analysis.

During the previous update, high values for cobalt and lead in upgradient well MW-3 were flagged in order to construct statistical limits that are conservative (i.e., lower) from a regulatory perspective. Also, a previously flagged value of selenium (0.0209 mg/L) was unflagged in well MW-3. A summary of flagged outliers follows this report (Figure C).

In accordance with Alabama Department of Environmental Management, the Groundwater Protections Standards (GWPS) were updated during the 2021 2nd semi-annual statistical analysis. The GWPS will be updated again during the 2023 2nd 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 July 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. A summary of the upper tolerance limits follows this report (page 19).

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, page 20) in the confidence interval comparisons described below. Exceptions are noted in Figure H for beryllium and cadmium. For these two parameters, the MCL's were used as the GWPS rather than the higher background UTLs to maintain the more conservative standard.

Confidence Intervals

Confidence intervals were then constructed on downgradient wells using a maximum of the most recent 8 samples through February 2023 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 were constructed when data did not follow a normal or transformed-normal distribution or when there were greater than 50% non-detects. The lower confidence limit, which is constructed with 99% confidence for parametric confidence intervals, is compared to the GWPS prepared as described above. The confidence level associated with nonparametric confidence intervals is dependent upon the number samples available.

As mentioned above, well/constituent pairs containing 100% non-detects for the most recent 8 samples did not require statistics; therefore, they were deselected prior to construction of confidence intervals. A list of deselected well/constituent pairs 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 (page 21). No exceedances were noted for any of the well/constituent pairs.

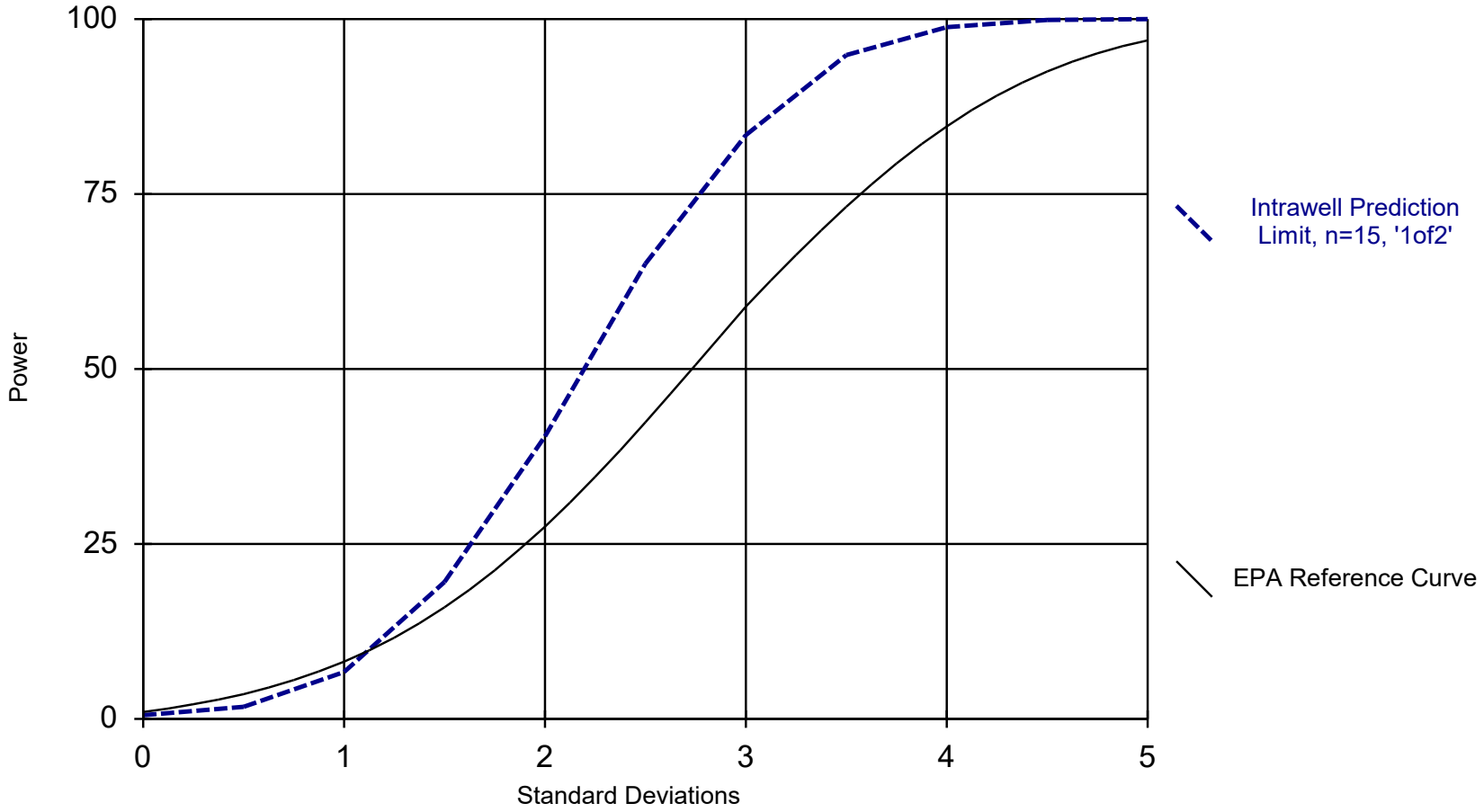
Thank you for the opportunity to assist you in the statistical analysis of groundwater quality for Gorgas CCR Landfill. If you have any questions or comments, please feel free to contact us.

For Groundwater Stats Consulting,

Andrew Collins
Project Manager

Kristina Rayner
Senior Statistician

Intrawell Power Curve

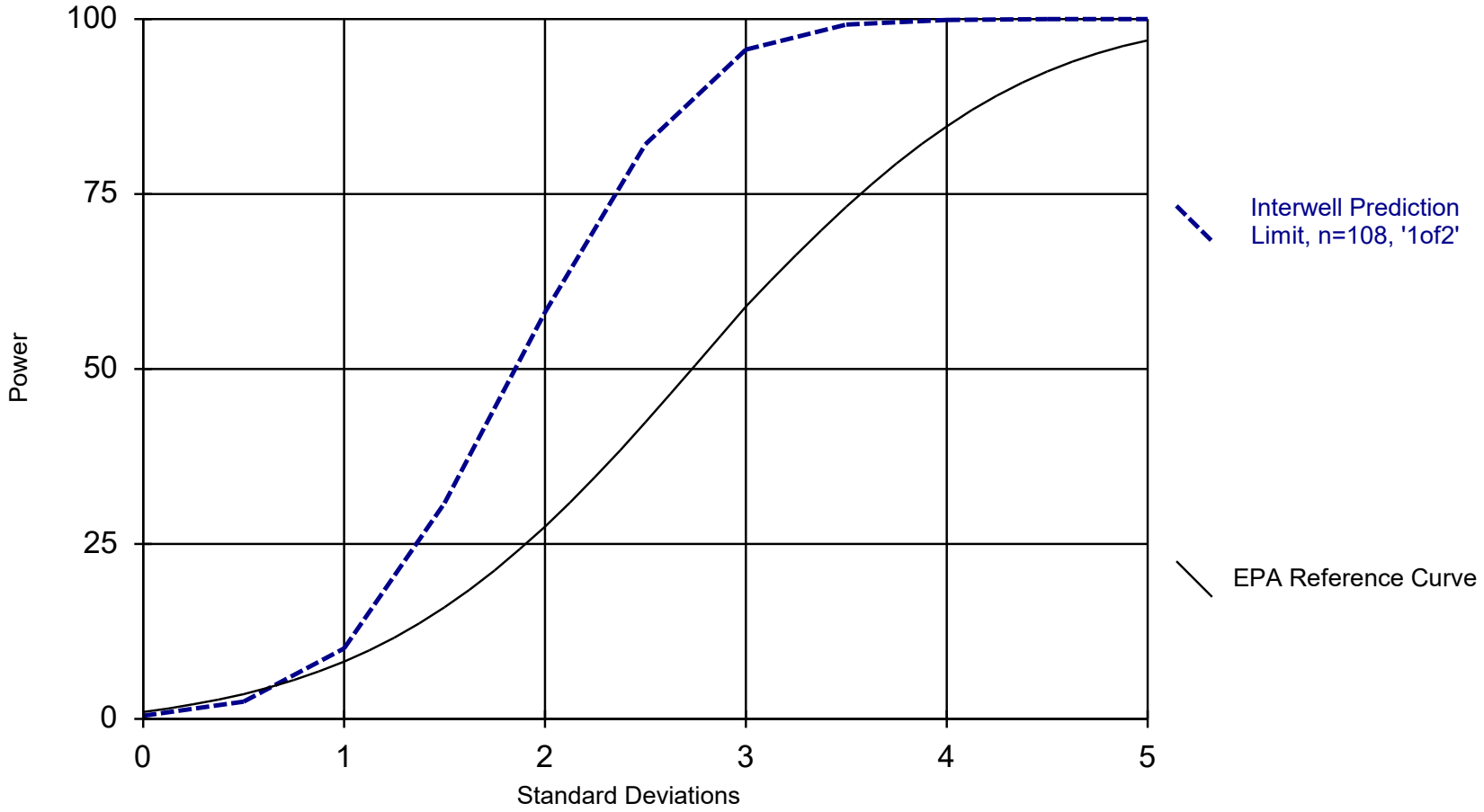


Kappa = 2.115, based on 4 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/18/2023 8:49 AM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Interwell Power Curve



Kappa = 1.745, based on 4 compliance wells and 7 constituents, evaluated semi-annually (this report reflects annual total).

Analysis Run 5/18/2023 8:50 AM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

100% Non-Detects: Appendix IV Downgradient

Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Antimony (mg/L)
MW-5, MW-6, MW-7, MW-8

Beryllium (mg/L)
MW-5, MW-7, MW-8

Cadmium (mg/L)
MW-5, MW-7, MW-8

Lead (mg/L)
MW-5, MW-7

Mercury (mg/L)
MW-5, MW-6, MW-7, MW-8

Selenium (mg/L)
MW-8

Thallium (mg/L)
MW-7, MW-8

Appendix III Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride, total (mg/L)	**MW-1**	**0.1878**	**n/a**	**2/20/2023**	**0.221**	**Yes**	**24**	**0.1172**	**0.03644**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-2**	**0.2528**	**n/a**	**2/20/2023**	**0.267**	**Yes**	**24**	**0.1456**	**0.05538**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-6**	**0.1576**	**n/a**	**2/22/2023**	**0.173**	**Yes**	**16**	**0.1372**	**0.009847**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-7**	**0.2144**	**n/a**	**2/21/2023**	**0.216**	**Yes**	**17**	**0.1848**	**0.01443**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	MW-1	0.1015	n/a	2/20/2023	0.1015ND	No	23	n/a	n/a	26.09	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Boron, total (mg/L)	MW-2	0.1015	n/a	2/20/2023	0.1015ND	No	23	n/a	n/a	21.74	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Boron, total (mg/L)	MW-3	0.1015	n/a	2/20/2023	0.1015ND	No	23	n/a	n/a	21.74	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Boron, total (mg/L)	MW-4	0.05253	n/a	2/21/2023	0.0408J	No	22	0.04512	0.003776	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-5	0.04034	n/a	2/21/2023	0.0315J	No	15	0.03281	0.003562	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-6	0.1015	n/a	2/22/2023	0.0356J	No	16	0.07909	0.01082	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-7	0.0854	n/a	2/21/2023	0.0645J	No	15	0.07347	0.005639	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-8	0.0831	n/a	2/21/2023	0.0609J	No	16	n/a	n/a	0	n/a	n/a	0.006456	NP Intra (normality) 1 of 2
Calcium, total (mg/L)	MW-1	243	n/a	2/20/2023	151	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Calcium, total (mg/L)	MW-2	214.8	n/a	2/20/2023	160	No	23	174.2	20.8	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-3	416	n/a	2/20/2023	210	No	23	300	59.54	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-4	386.1	n/a	2/21/2023	232	No	23	304.8	41.68	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-5	459.6	n/a	2/21/2023	367	No	16	387	34.95	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-6	500.3	n/a	2/22/2023	250	No	16	388.9	53.66	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-7	343.5	n/a	2/21/2023	286	No	16	85434	15683	0	None	x^2	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-8	340	n/a	2/21/2023	327	No	16	303.1	17.76	0	None	No	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	**MW-1**	**0.1878**	**n/a**	**2/20/2023**	**0.221**	**Yes**	**24**	**0.1172**	**0.03644**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-2**	**0.2528**	**n/a**	**2/20/2023**	**0.267**	**Yes**	**24**	**0.1456**	**0.05538**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	MW-3	0.5886	n/a	2/20/2023	0.379	No	24	0.3299	0.1336	0	None	No	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	MW-4	0.4215	n/a	2/21/2023	0.415	No	24	0.1114	0.03425	0	None	x^2	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	MW-5	0.42	n/a	2/21/2023	0.319	No	17	0.3204	0.0485	0	None	No	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	**MW-6**	**0.1576**	**n/a**	**2/22/2023**	**0.173**	**Yes**	**16**	**0.1372**	**0.009847**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-7**	**0.2144**	**n/a**	**2/21/2023**	**0.216**	**Yes**	**17**	**0.1848**	**0.01443**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	MW-8	0.2341	n/a	2/21/2023	0.212	No	17	0.21	0.01171	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-1	1665	n/a	2/20/2023	1520	No	22	1461	104.1	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-2	1274	n/a	2/20/2023	767	No	23	997.8	141.7	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-3	3272	n/a	2/20/2023	2110	No	23	2451	421.1	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-4	3143	n/a	2/21/2023	1930	No	23	2511	324	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-5	2582	n/a	2/21/2023	2210	No	16	2304	133.9	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-6	2274	n/a	2/22/2023	1870	No	16	2001	131.7	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-7	1604	n/a	2/21/2023	1450	No	15	1324	132.3	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-8	1640	n/a	2/21/2023	1510	No	15	n/a	n/a	0	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-1	2519	n/a	2/20/2023	2280	No	22	2197	164	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-2	2021	n/a	2/20/2023	1420	No	23	1643	193.7	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-3	5051	n/a	2/20/2023	3230	No	23	3729	678.1	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-4	4600	n/a	2/21/2023	3160	No	23	1.5e7	3201096	0	None	x^2	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-5	4202	n/a	2/21/2023	3310	No	16	3794	196.6	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-6	3466	n/a	2/22/2023	2790	No	16	1.1e7	676605	0	None	x^2	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-7	2590	n/a	2/21/2023	2220	No	16	6.3e16	2.6e16	0	None	x^5	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-8	2808	n/a	2/21/2023	2370	No	16	2573	113.3	0	None	No	0.00188	Param Intra 1 of 2

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chloride, Total (mg/L)	**MW-5**	**4.6**	**n/a**	**2/21/2023**	**5.25**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**MW-7**	**4.6**	**n/a**	**2/21/2023**	**6.12**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**MW-8**	**4.6**	**n/a**	**2/21/2023**	**4.86**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-5**	**6.35**	**4.51**	**2/21/2023**	**6.5**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-7**	**6.35**	**4.51**	**2/21/2023**	**6.72**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-8**	**6.35**	**4.51**	**2/21/2023**	**6.75**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chloride, Total (mg/L)	**MW-5**	**4.6**	**n/a**	**2/21/2023**	**5.25**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	MW-6	4.6	n/a	2/22/2023	4.37	No	108	n/a	n/a	2.778	n/a	n/a	0.0001702	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**MW-7**	**4.6**	**n/a**	**2/21/2023**	**6.12**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**MW-8**	**4.6**	**n/a**	**2/21/2023**	**4.86**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-5**	**6.35**	**4.51**	**2/21/2023**	**6.5**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	MW-6	6.35	4.51	2/22/2023	4.98	No	109	n/a	n/a	0	n/a	n/a	0.0003345	NP Inter (normality) 1 of 2
pH, Field (SU)	**MW-7**	**6.35**	**4.51**	**2/21/2023**	**6.72**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-8**	**6.35**	**4.51**	**2/21/2023**	**6.75**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:44 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride, Total (mg/L)	**MW-8**	**-23.35**	**-100**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride, total (mg/L)	**MW-2 (bg)**	**0.01459**	**183**	**131**	**Yes**	**28**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-1 (bg)**	**-0.01675**	**-154**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-2 (bg)**	**0.04641**	**169**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-8**	**0.04545**	**156**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:44 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride, Total (mg/L)	MW-1 (bg)	-0.03183	-67	-124	No	27	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-2 (bg)	-0.144	-72	-124	No	27	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-3 (bg)	0.07161	89	124	No	27	7.407	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-4 (bg)	-0.06041	-97	-124	No	27	3.704	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-5	-0.1261	-43	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-7	-4.869	-73	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	**MW-8**	**-23.35**	**-100**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride, total (mg/L)	MW-1 (bg)	-0.003095	-33	-131	No	28	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	**MW-2 (bg)**	**0.01459**	**183**	**131**	**Yes**	**28**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride, total (mg/L)	MW-3 (bg)	0.002778	21	131	No	28	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-4 (bg)	0.007162	85	131	No	28	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-6	-0.00234	-54	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-7	0.001693	32	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	**MW-1 (bg)**	**-0.01675**	**-154**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-2 (bg)**	**0.04641**	**169**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	MW-3 (bg)	0.03562	35	124	No	27	0	n/a	n/a	0.01	NP
pH, Field (SU)	MW-4 (bg)	0.01607	93	131	No	28	0	n/a	n/a	0.01	NP
pH, Field (SU)	MW-5	0.01884	86	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	MW-7	-0.01489	-38	-87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	**MW-8**	**0.04545**	**156**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 11/16/2021, 10:57 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.00143	n/a	n/a	n/a	96	n/a	n/a	93.75	n/a	n/a	0.007269	NP Inter
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	96	n/a	n/a	83.33	n/a	n/a	0.007269	NP Inter
Barium (mg/L)	n/a	0.0165	n/a	n/a	n/a	96	n/a	n/a	0	n/a	n/a	0.007269	NP Inter
Beryllium (mg/L)	n/a	0.0121	n/a	n/a	n/a	94	n/a	n/a	84.04	n/a	n/a	0.008054	NP Inter
Cadmium (mg/L)	n/a	0.00598	n/a	n/a	n/a	94	n/a	n/a	45.74	n/a	n/a	0.008054	NP Inter
Chromium (mg/L)	n/a	0.0105	n/a	n/a	n/a	96	n/a	n/a	89.58	n/a	n/a	0.007269	NP Inter
Cobalt (mg/L)	n/a	0.49	n/a	n/a	n/a	94	n/a	n/a	26.6	n/a	n/a	0.008054	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.47	n/a	n/a	n/a	92	n/a	n/a	0	n/a	n/a	0.008924	NP Inter
Fluoride, total (mg/L)	n/a	0.63	n/a	n/a	n/a	100	n/a	n/a	0	n/a	n/a	0.005921	NP Inter
Lead (mg/L)	n/a	0.00108	n/a	n/a	n/a	95	n/a	n/a	95.79	n/a	n/a	0.007651	NP Inter
Lithium (mg/L)	n/a	0.419	n/a	n/a	n/a	96	n/a	n/a	0	n/a	n/a	0.007269	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	96	n/a	n/a	100	n/a	n/a	0.007269	NP Inter
Molybdenum (mg/L)	n/a	0.0002	n/a	n/a	n/a	96	n/a	n/a	97.92	n/a	n/a	0.007269	NP Inter
Selenium (mg/L)	n/a	0.0209	n/a	n/a	n/a	96	n/a	n/a	60.42	n/a	n/a	0.007269	NP Inter
Thallium (mg/L)	n/a	0.000226	n/a	n/a	n/a	96	n/a	n/a	96.88	n/a	n/a	0.007269	NP Inter

GORGAS CCR LANDFILL GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.0165	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.49	0.49
Combined Radium-226/228	pCi/L	1.47	5
Fluoride	mg/L	0.63	4
Lead	mg/L	0.00108	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.0209	0.05
Thallium	mg/L	0.000226	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 second semi-annual sampling event in 2021.

Confidence Intervals - All Results (No Significant)

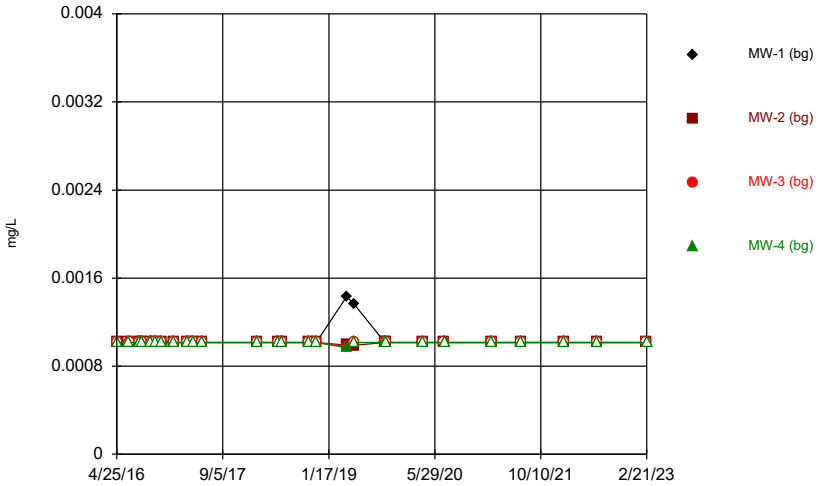
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-5	0.005	0.00019	0.01	No	8	0.00164	0.002126	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-6	0.005436	0.003264	0.01	No	8	0.00435	0.001025	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.001617	0.001398	0.01	No	8	0.001508	0.0001031	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-8	0.001656	0.00103	0.01	No	8	0.001338	0.0003428	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-5	0.01287	0.01063	2	No	8	0.01175	0.001054	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.01516	0.01296	2	No	8	0.01406	0.001039	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.0147	0.01306	2	No	8	0.01389	0.0008043	0	None	x^3	0.01	Param.
Barium (mg/L)	MW-8	0.01457	0.0136	2	No	8	0.01409	0.0004581	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-6	0.0009721	0.0002071	0.004	No	8	0.0008748	0.0002821	50	Kaplan-Meier	x^2	0.01	Param.
Cadmium (mg/L)	MW-6	0.001305	0.00004582	0.005	No	8	0.0007151	0.0007993	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	MW-5	0.001015	0.00027	0.1	No	8	0.0009219	0.0002634	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-6	0.00102	0.00024	0.1	No	8	0.0007406	0.0003859	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-7	0.001015	0.00032	0.1	No	8	0.0009281	0.0002457	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-8	0.001015	0.00025	0.1	No	8	0.0009194	0.0002705	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-5	0.005	0.000538	0.49	No	8	0.00246	0.002113	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	MW-6	0.4074	0.04205	0.49	No	8	0.2143	0.2004	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	MW-7	0.006127	0.003563	0.49	No	8	0.004845	0.00121	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-8	0.008278	0.006947	0.49	No	8	0.007613	0.000628	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.8369	0.2596	5	No	8	0.5483	0.2723	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	2.522	0.1331	5	No	8	1.328	1.127	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-7	0.7205	0.291	5	No	8	0.5058	0.2026	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-8	2.19	0.398	5	No	8	0.8184	0.6442	0	None	No	0.004	NP (normality)
Fluoride, total (mg/L)	MW-5	0.3348	0.2552	4	No	8	0.295	0.0375	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-6	0.1548	0.116	4	No	8	0.1354	0.01828	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-7	0.2435	0.1595	4	No	8	0.2015	0.03959	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-8	0.2308	0.1714	4	No	8	0.2011	0.02803	0	None	No	0.01	Param.
Lead (mg/L)	MW-6	0.000457	0.0002	0.015	No	8	0.0002361	0.00008995	75	None	No	0.004	NP (NDs)
Lead (mg/L)	MW-8	0.000203	0.000088	0.015	No	8	0.0001486	0.00005849	50	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-5	0.1267	0.09462	0.419	No	8	0.1107	0.01514	0	None	No	0.01	Param.
Lithium (mg/L)	MW-6	0.2487	0.09719	0.419	No	8	0.1707	0.0862	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-7	0.131	0.0907	0.419	No	8	0.1068	0.01712	0	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-8	0.163	0.1263	0.419	No	8	0.1446	0.01732	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-5	0.01	0.000945	0.1	No	8	0.004488	0.004566	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-6	0.0002823	0.00004206	0.1	No	8	0.0001941	0.00008803	50	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.01	0.000846	0.1	No	8	0.004342	0.004686	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-8	0.0129	0.00031	0.1	No	8	0.005529	0.005636	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	MW-5	0.01	0.00124	0.05	No	8	0.004927	0.004216	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	MW-6	0.0019	0.001015	0.05	No	8	0.001126	0.0003129	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	MW-7	0.001015	0.000677	0.05	No	8	0.0009728	0.0001195	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-5	0.000203	0.00007	0.002	No	8	0.0001864	0.00004702	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-6	0.000203	0.00011	0.002	No	8	0.0001839	0.00003649	75	None	No	0.004	NP (NDs)

FIGURE A.

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

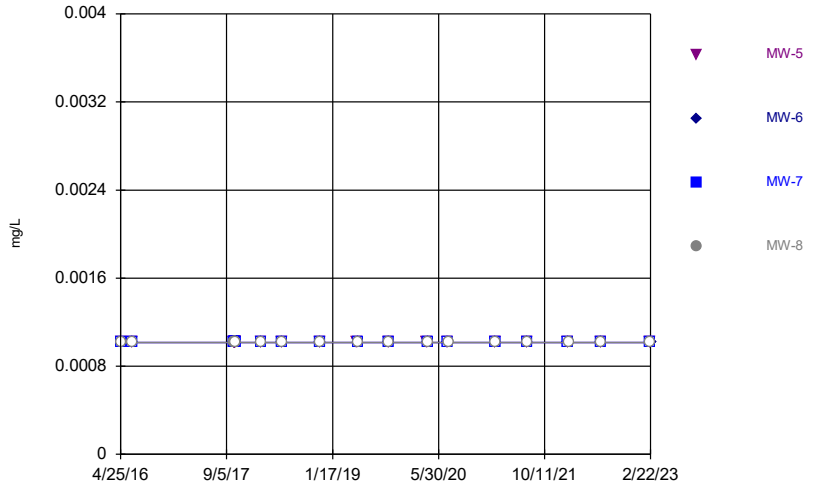
Time Series



Constituent: Antimony Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series



Constituent: Antimony Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

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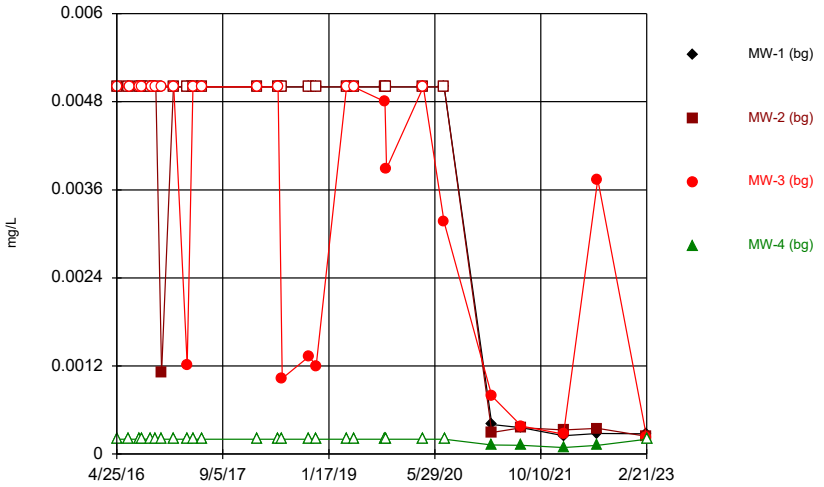
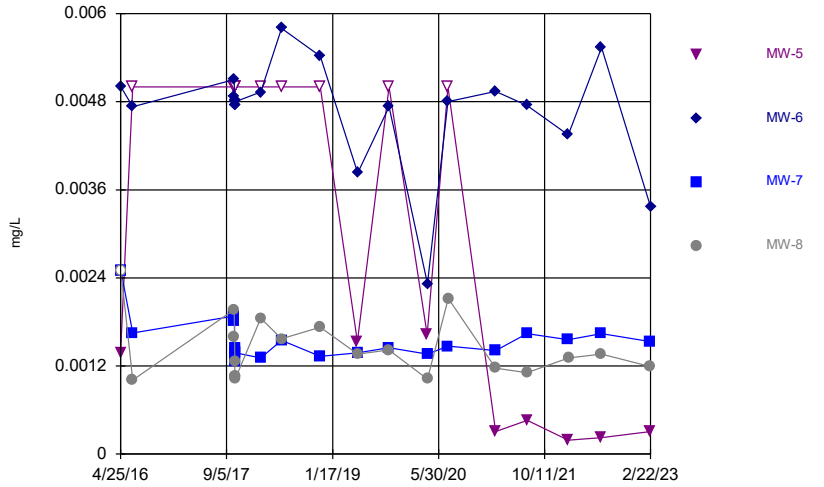


Constituent: Arsenic Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

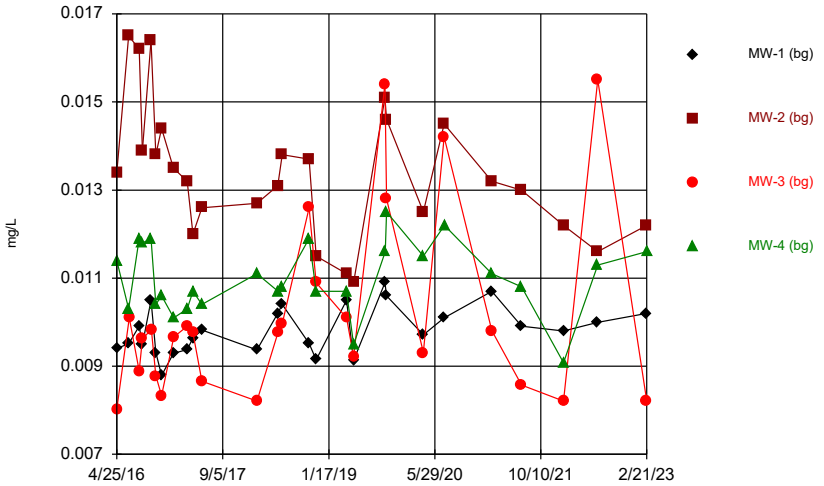
Time Series



Constituent: Arsenic Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

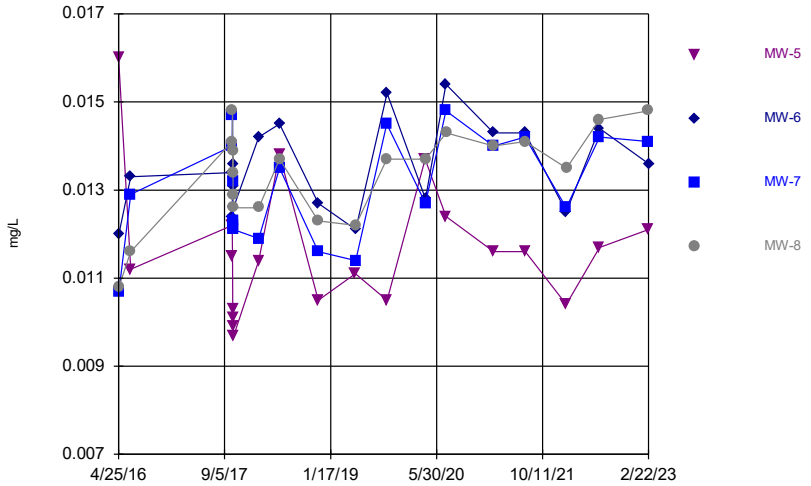


Constituent: Barium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



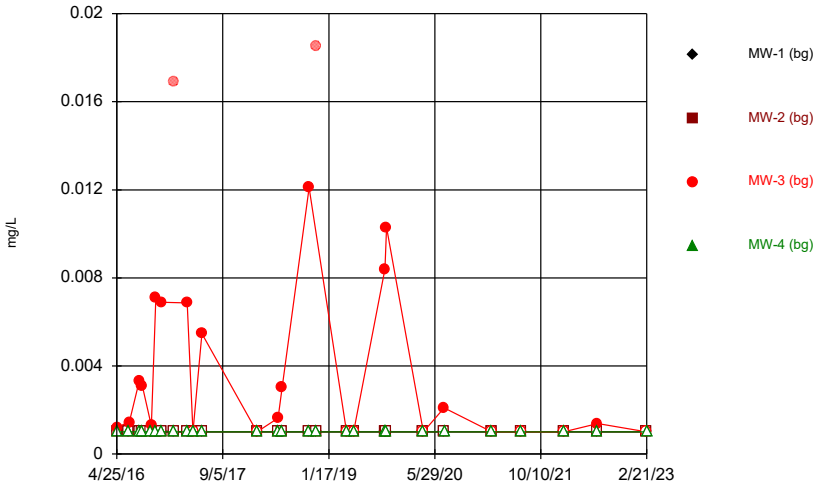
Constituent: Barium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



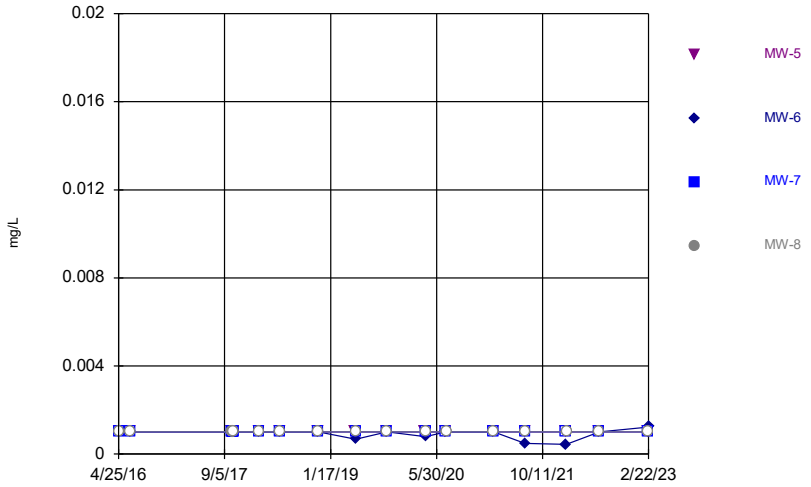
Constituent: Beryllium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

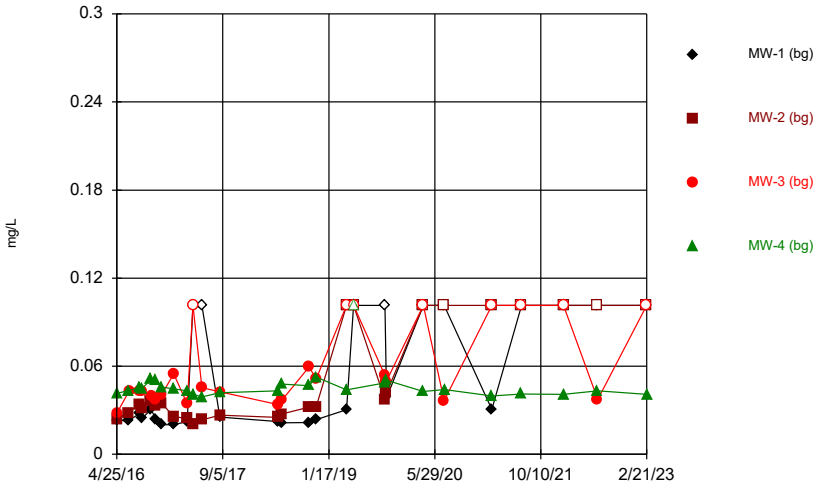


Constituent: Beryllium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

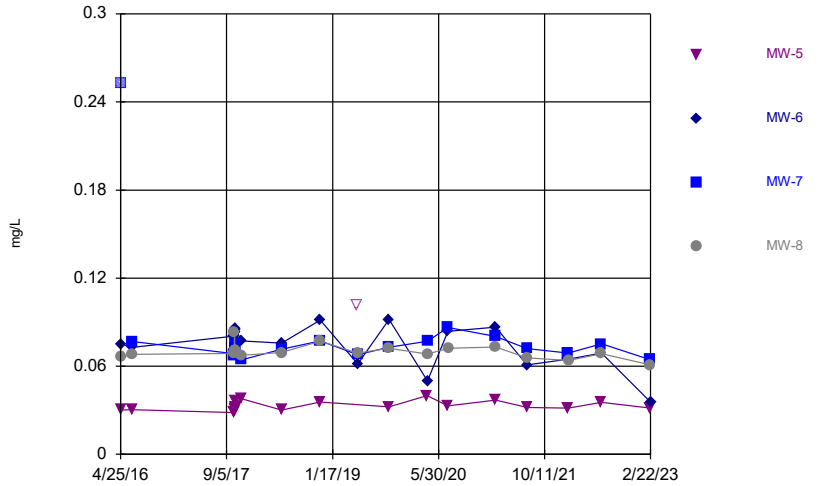
Time Series



Constituent: Boron, total Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

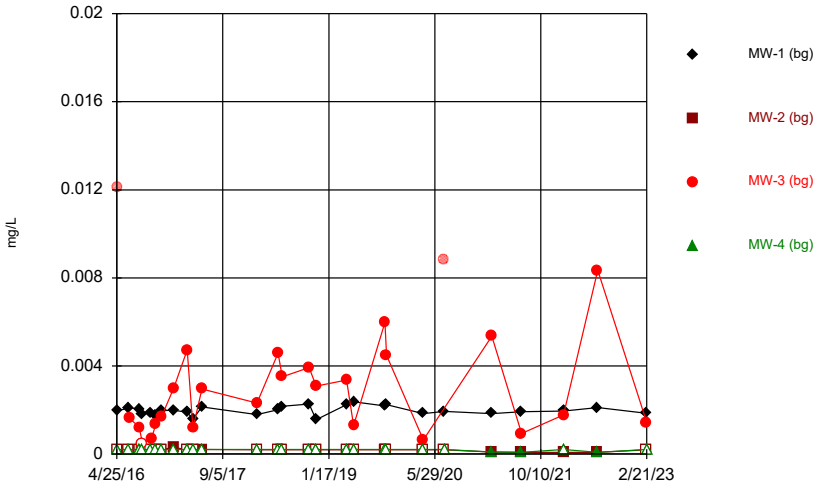
Time Series



Constituent: Boron, total Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

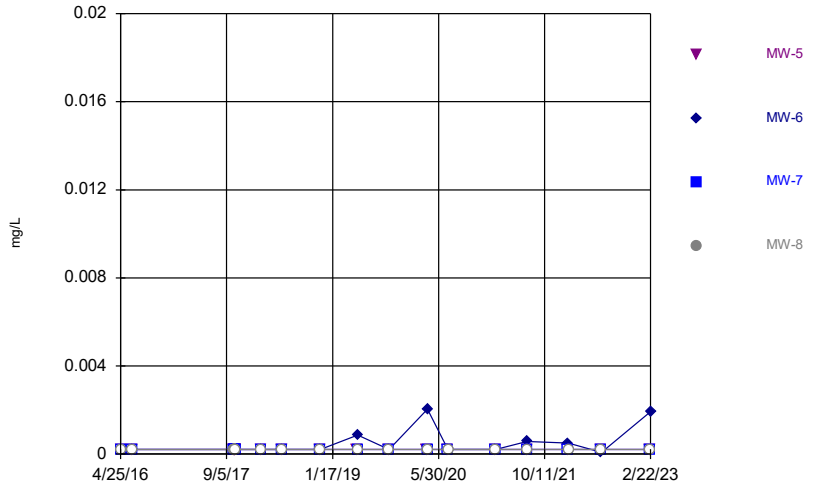
Time Series



Constituent: Cadmium Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

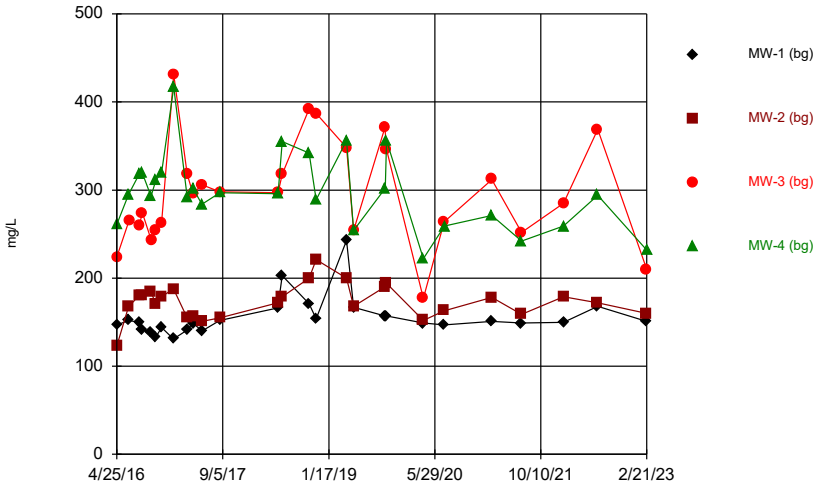
Time Series



Constituent: Cadmium Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

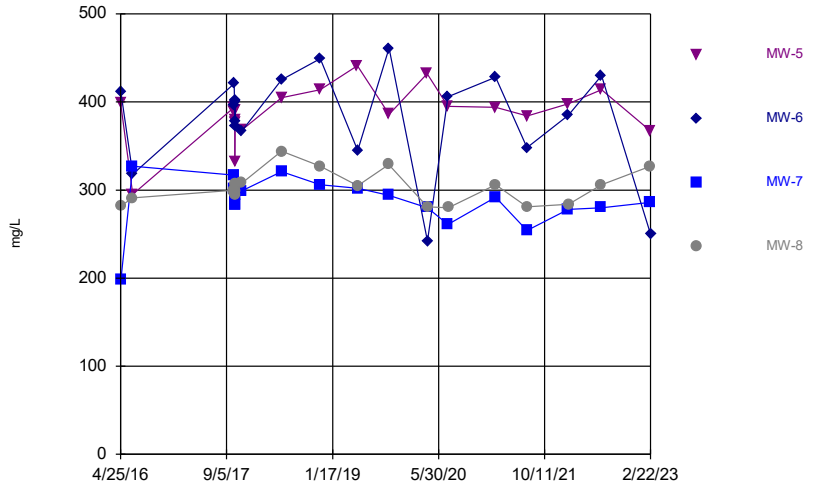


Constituent: Calcium, total Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



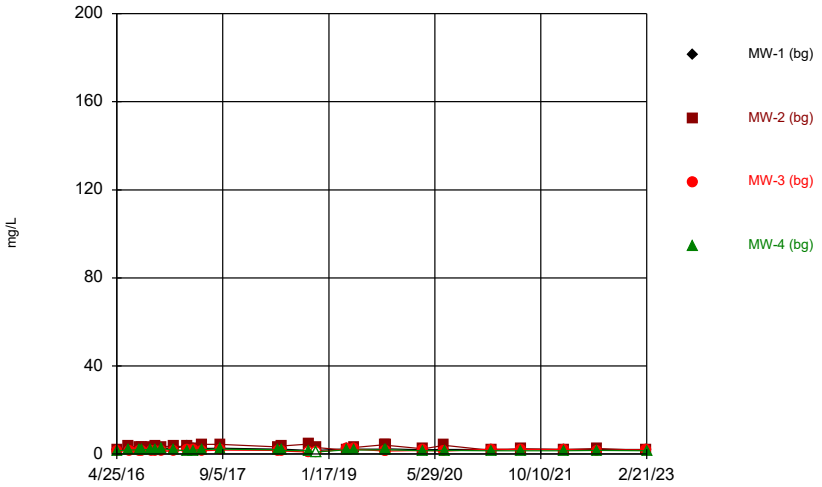
Constituent: Calcium, total Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

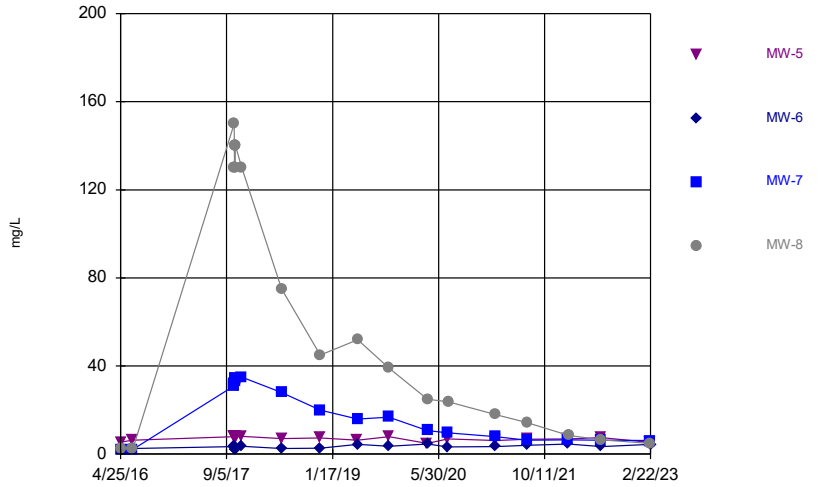


Constituent: Chloride, Total Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

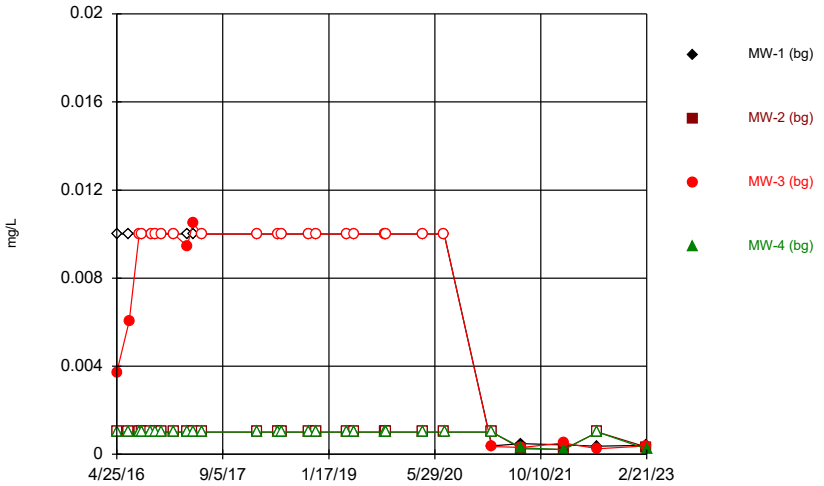


Constituent: Chloride, Total Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

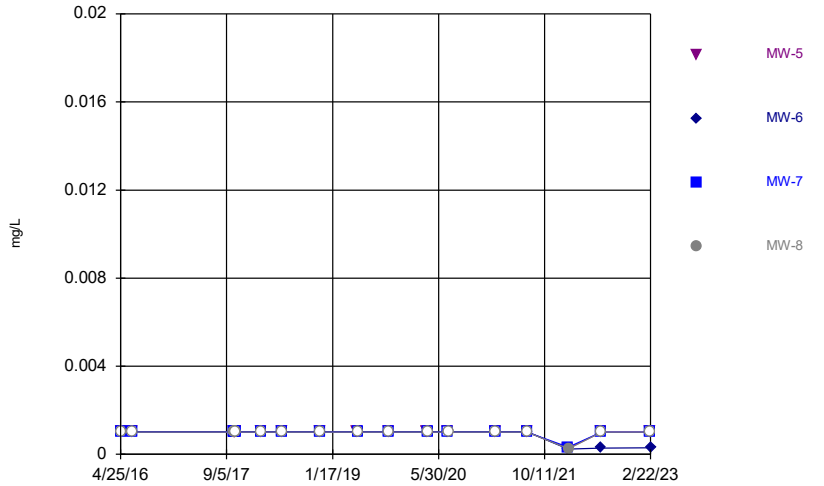
Time Series



Constituent: Chromium Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

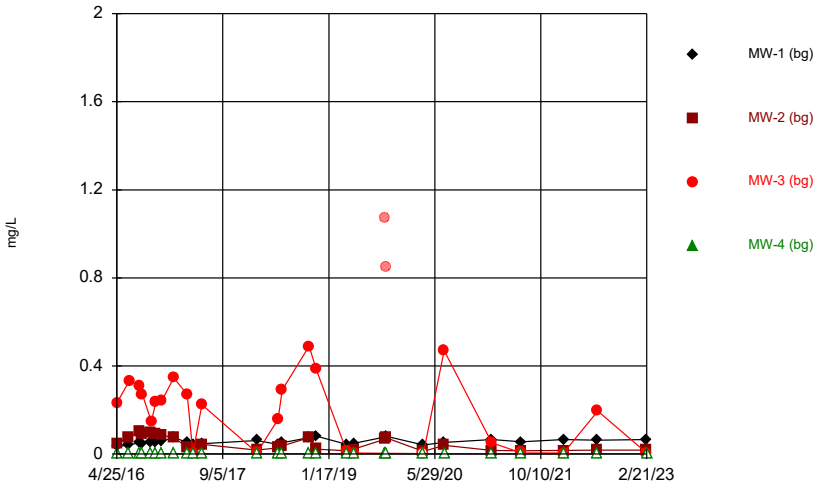
Time Series



Constituent: Chromium Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

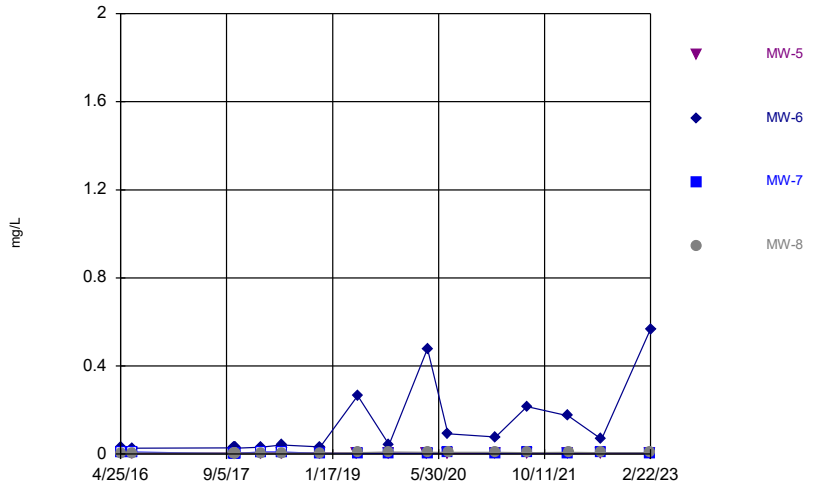
Time Series



Constituent: Cobalt Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

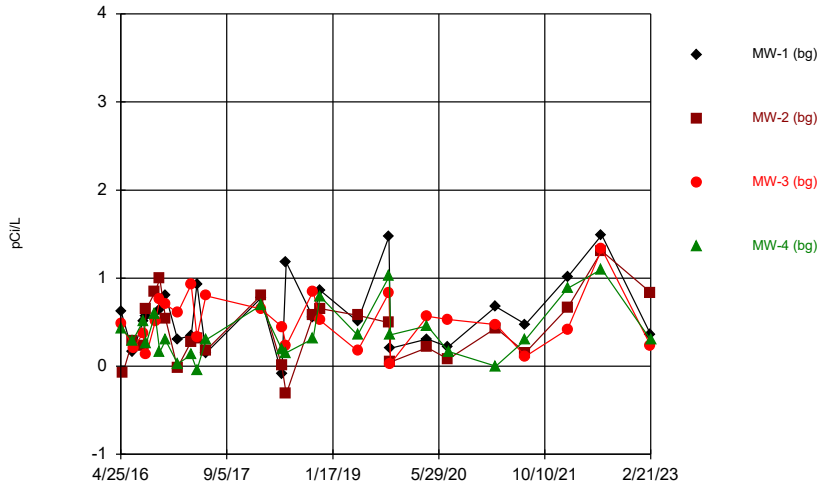
Time Series



Constituent: Cobalt Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

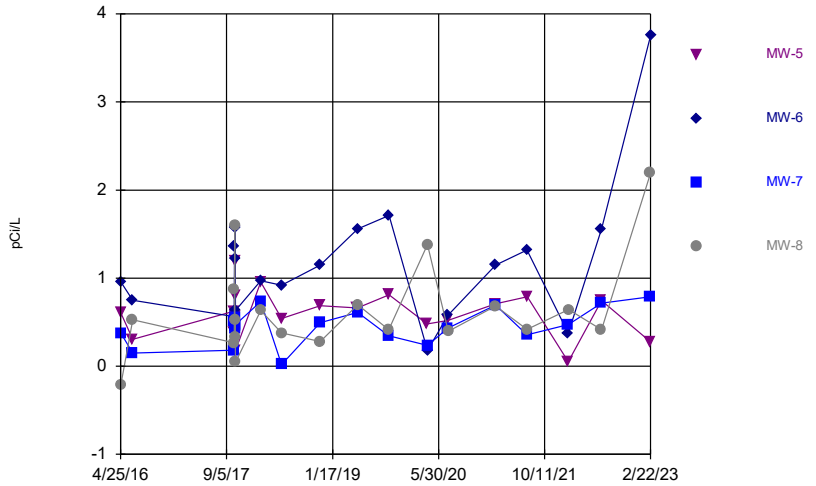


Constituent: Combined Radium 226 + 228 Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

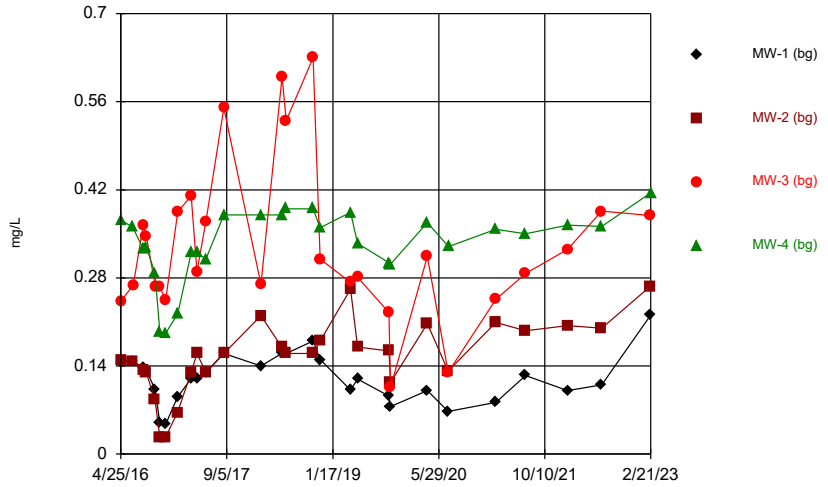


Constituent: Combined Radium 226 + 228 Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



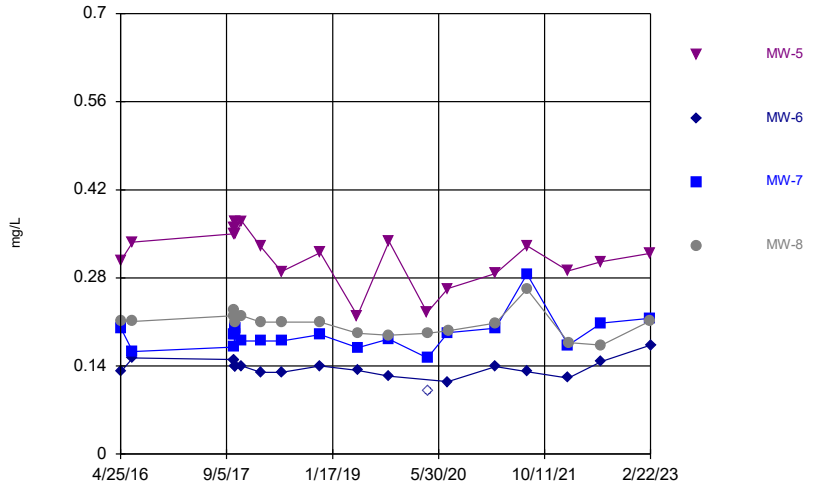
Constituent: Fluoride, total Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

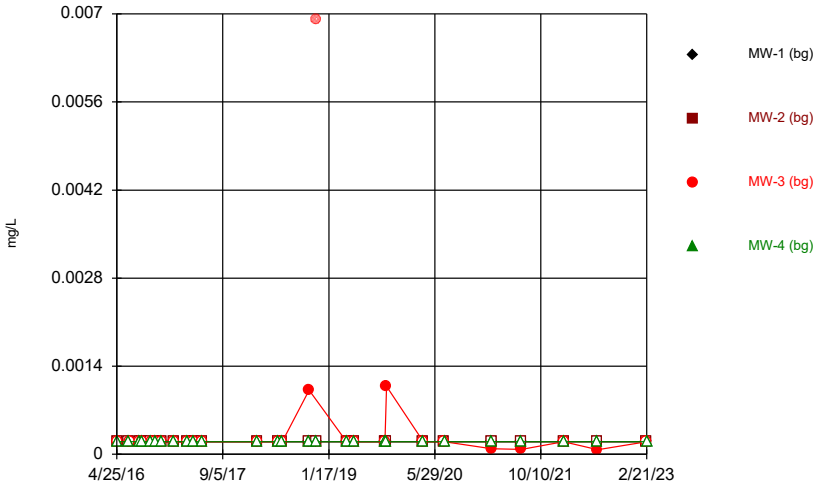


Constituent: Fluoride, total Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

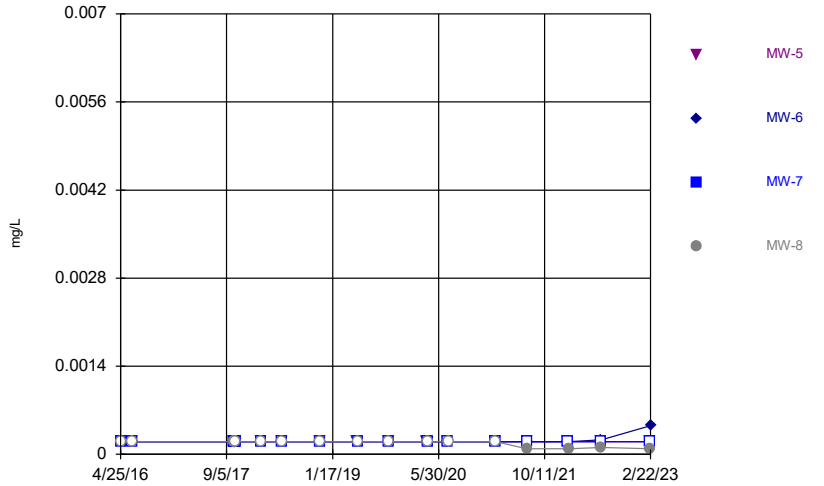
Time Series



Constituent: Lead Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

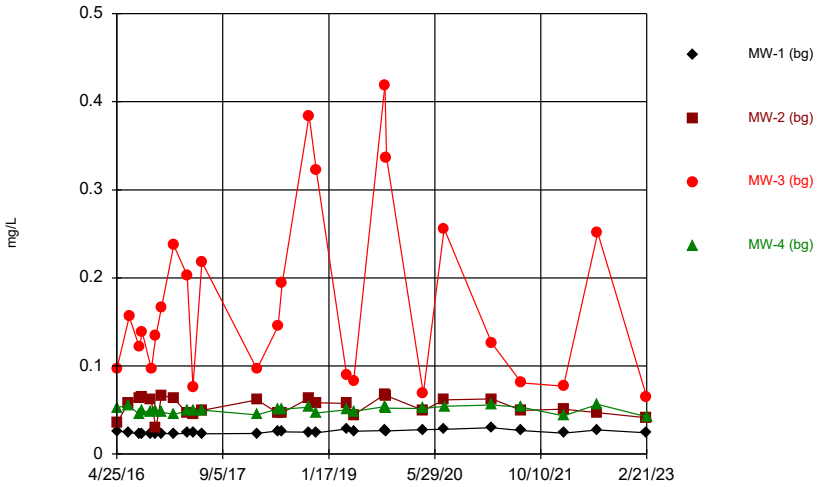
Time Series



Constituent: Lead Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

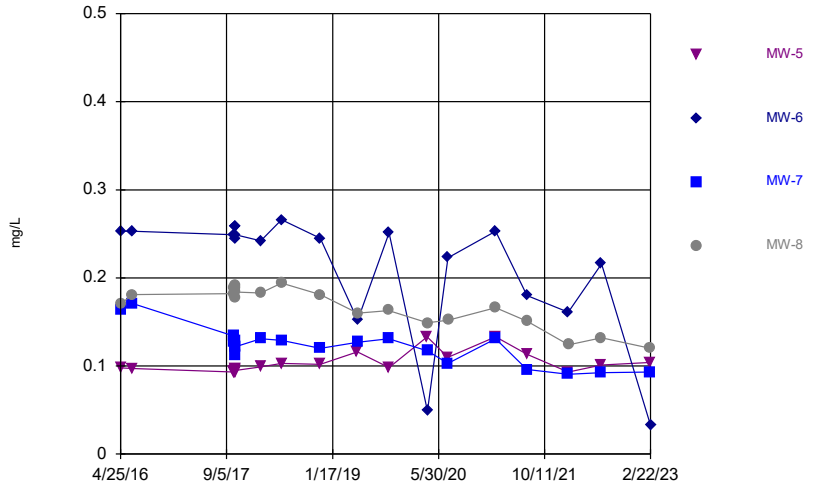
Time Series



Constituent: Lithium Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

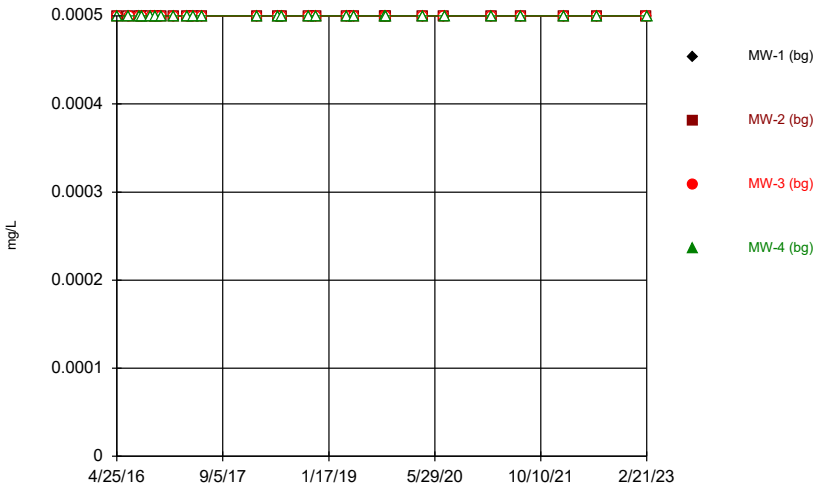
Time Series



Constituent: Lithium Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

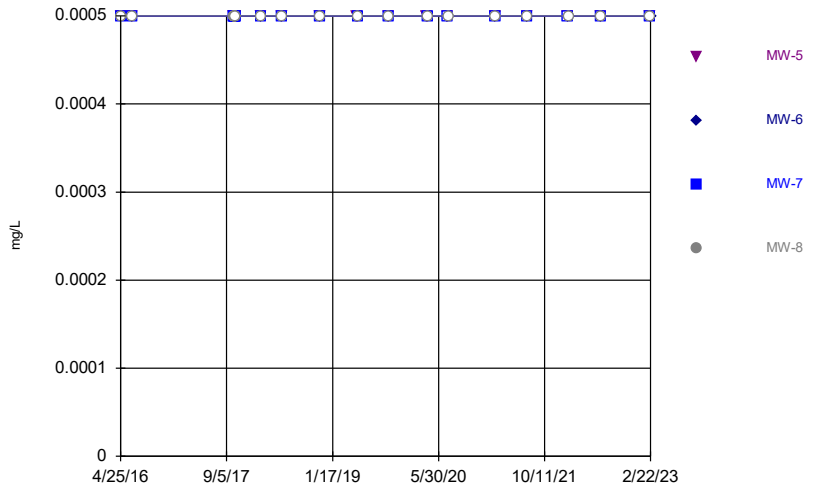
Time Series



Constituent: Mercury Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

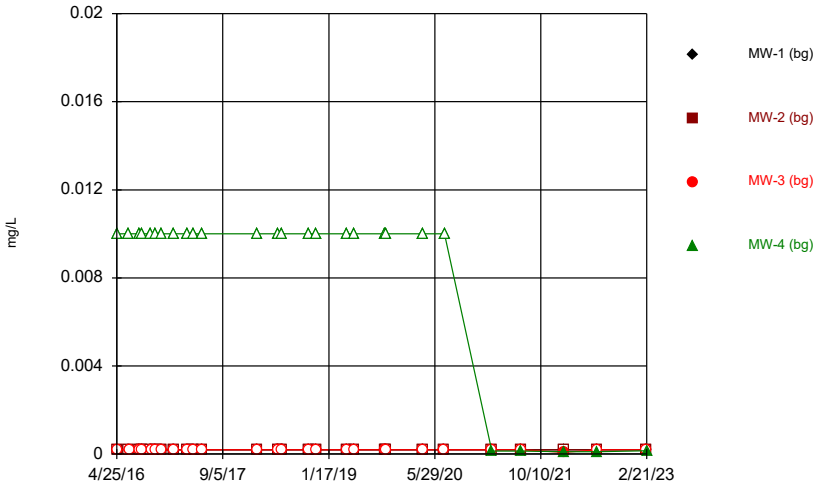
Time Series



Constituent: Mercury Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

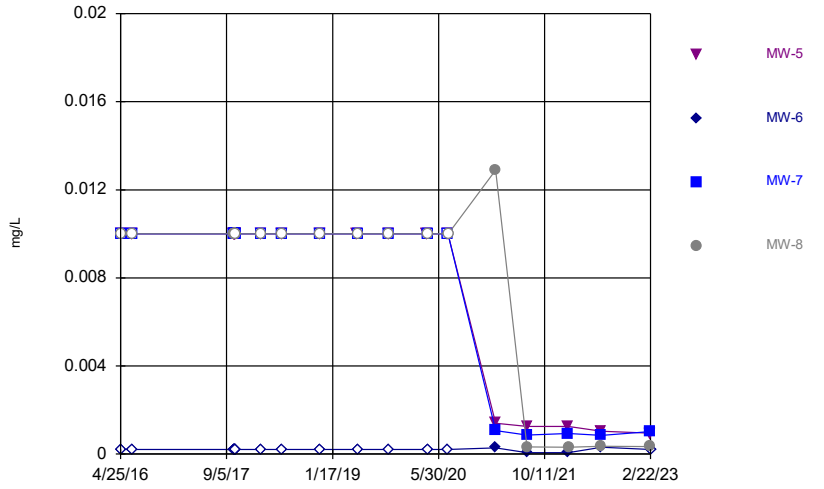
Time Series



Constituent: Molybdenum Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

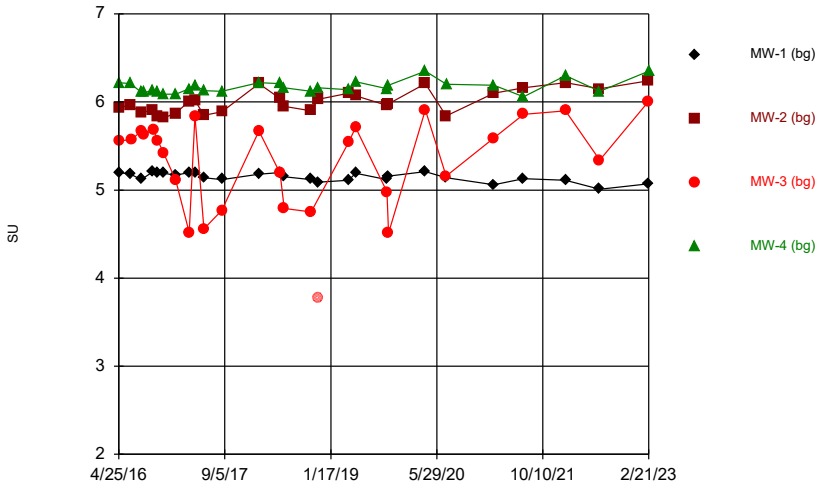
Time Series



Constituent: Molybdenum Analysis Run 5/17/2023 2:18 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

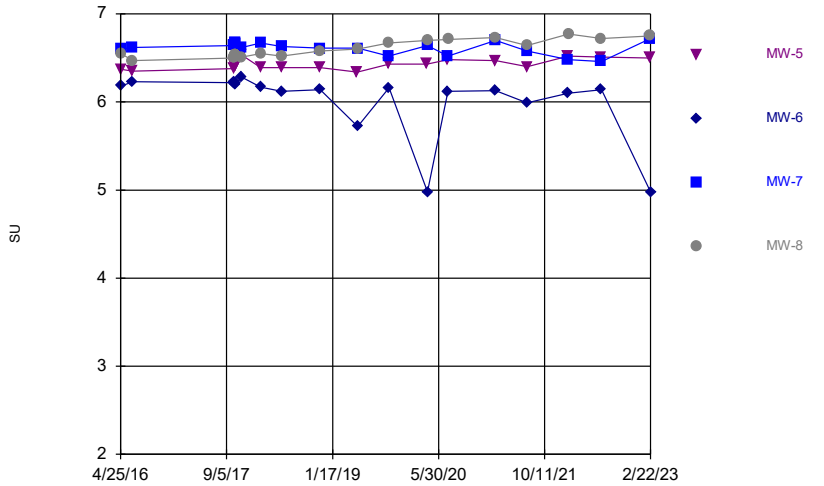


Constituent: pH, Field Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



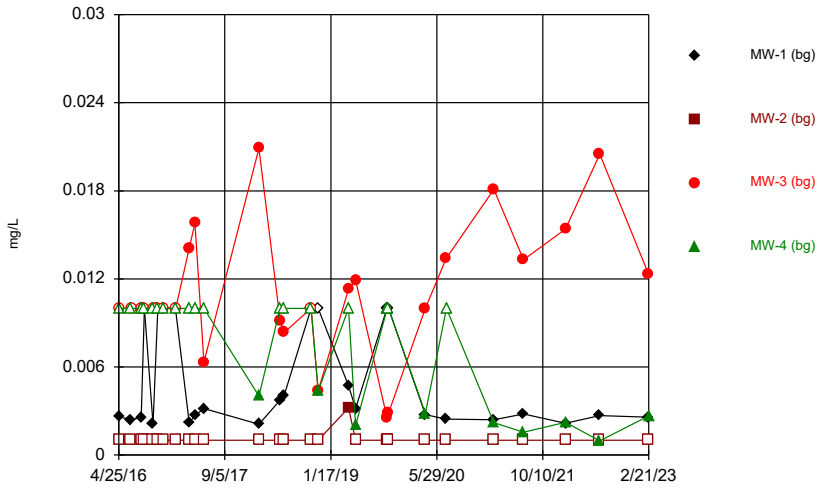
Constituent: pH, Field Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series



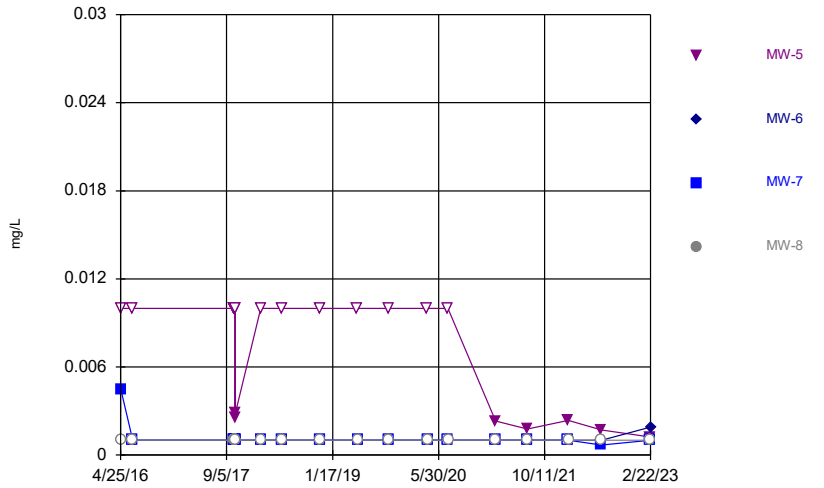
Constituent: Selenium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Hollow symbols indicate censored values.

Time Series

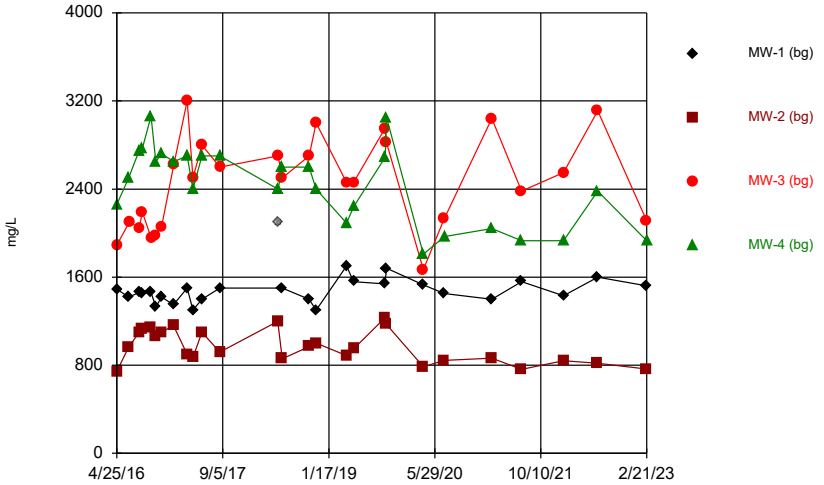


Constituent: Selenium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

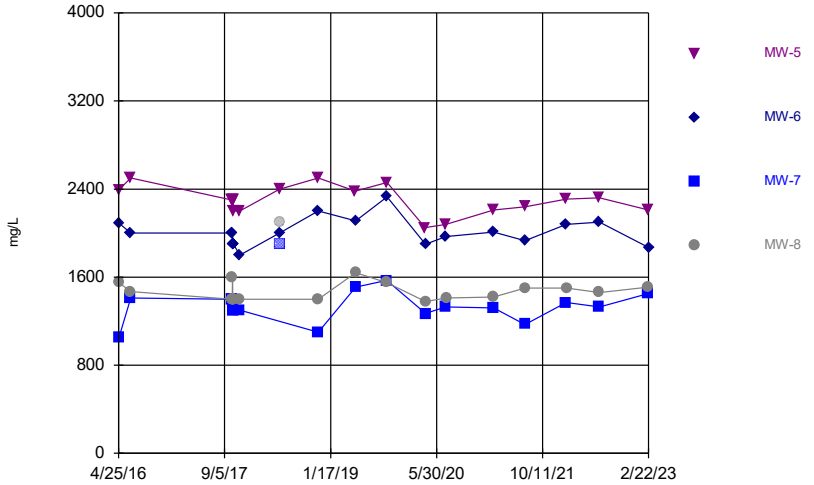


Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series

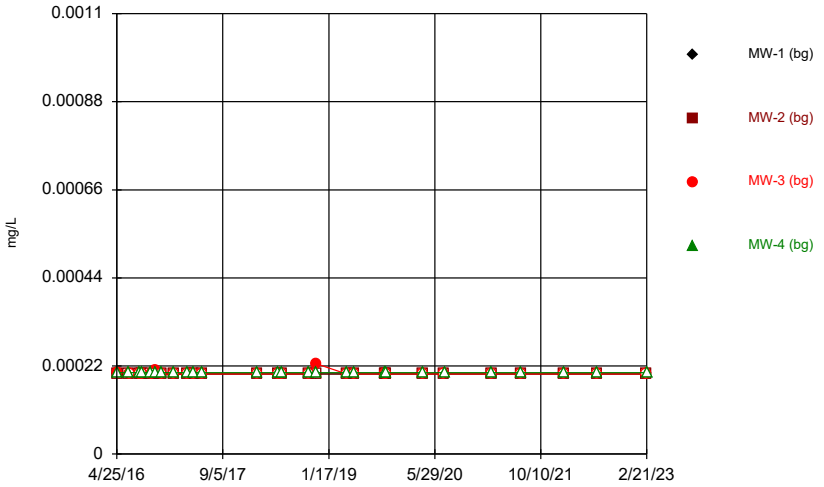


Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Time Series

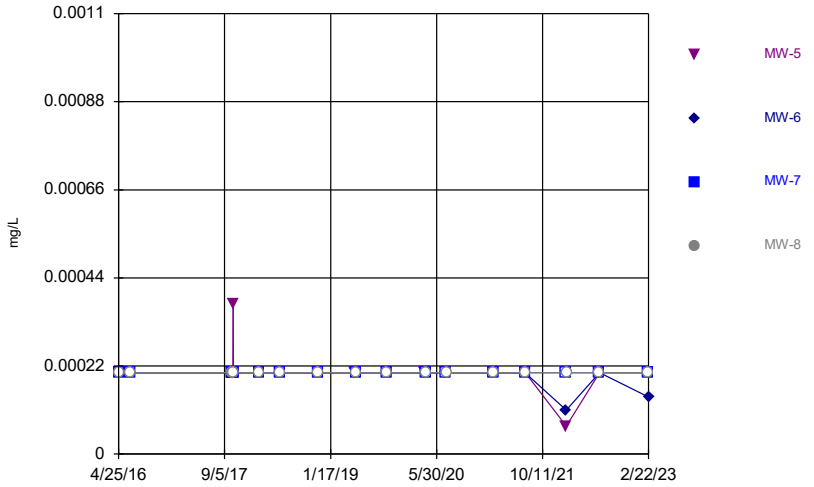


Constituent: Thallium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

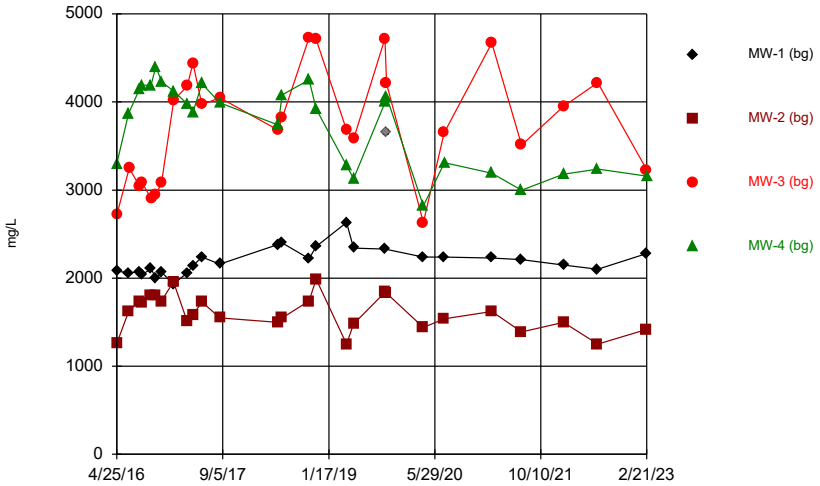
Time Series



Constituent: Thallium Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Time Series

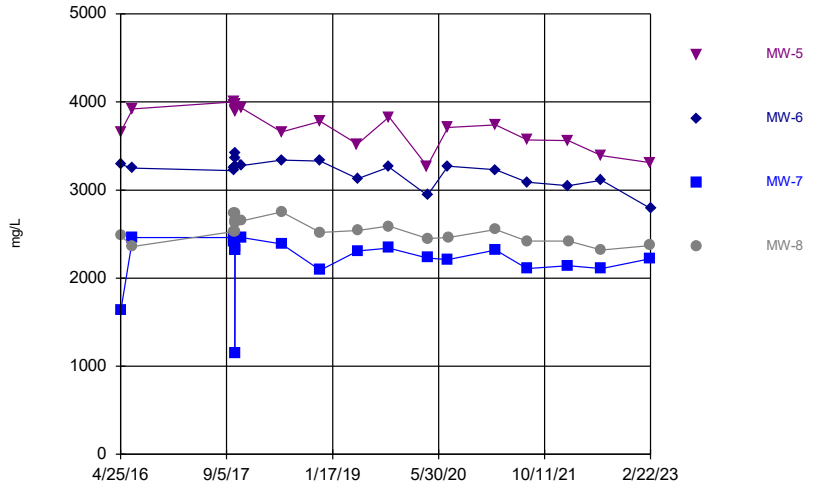


Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Time Series



Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:18 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.001015	<0.001015	<0.001015
4/26/2016	<0.001015			
6/20/2016	<0.001015	<0.001015		<0.001015
6/22/2016			<0.001015	
8/8/2016	<0.001015	<0.001015		
8/9/2016			<0.001015	<0.001015
8/24/2016	<0.001015	<0.001015	<0.001015	<0.001015
10/3/2016	<0.001015	<0.001015		<0.001015
10/4/2016			<0.001015	
10/26/2016	<0.001015	<0.001015	<0.001015	<0.001015
11/21/2016	<0.001015	<0.001015	<0.001015	<0.001015
1/17/2017	<0.001015	<0.001015		
1/18/2017			<0.001015	<0.001015
3/22/2017	<0.001015	<0.001015	<0.001015	<0.001015
4/18/2017	<0.001015	<0.001015	<0.001015	<0.001015
5/30/2017	<0.001015			
5/31/2017		<0.001015	<0.001015	<0.001015
2/13/2018	<0.001015	<0.001015	<0.001015	<0.001015
5/22/2018	<0.001015	<0.001015		
5/23/2018				<0.001015
5/24/2018			<0.001015	
6/12/2018	<0.001015	<0.001015	<0.001015	<0.001015
10/17/2018	<0.001015	<0.001015	<0.001015	<0.001015
11/19/2018	<0.001015	<0.001015	<0.001015	<0.001015
4/10/2019	0.00143 (J)	0.000993 (J)	0.000978 (J)	0.00097 (J)
5/14/2019	0.00137 (J)	0.000989 (J)	<0.001015	<0.001015
10/8/2019	<0.001015	<0.001015	<0.001015	
10/10/2019				<0.001015
10/16/2019	<0.001015	<0.001015	<0.001015	<0.001015
4/6/2020	<0.001015	<0.001015	<0.001015	<0.001015
7/13/2020	<0.001015	<0.001015	<0.001015	
7/14/2020				<0.001015
2/22/2021	<0.001015	<0.001015	<0.001015	<0.001015
7/12/2021	<0.001015	<0.001015	<0.001015	<0.001015
1/25/2022	<0.001015	<0.001015	<0.001015	<0.001015
7/5/2022	<0.001015	<0.001015	<0.001015	<0.001015
2/20/2023	<0.001015	<0.001015	<0.001015	
2/21/2023				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Antimony (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.001015			
4/27/2016		<0.001015	<0.001015	<0.001015
6/21/2016	<0.001015	<0.001015	<0.001015	<0.001015
10/12/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/13/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/14/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/15/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/16/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/17/2017	<0.001015	<0.001015	<0.001015	<0.001015
2/14/2018	<0.001015	<0.001015	<0.001015	<0.001015
5/23/2018	<0.001015	<0.001015	<0.001015	<0.001015
11/20/2018	<0.001015	<0.001015	<0.001015	<0.001015
5/14/2019	<0.001015			
5/15/2019		<0.001015	<0.001015	<0.001015
10/8/2019			<0.001015	
10/9/2019				<0.001015
10/10/2019	<0.001015	<0.001015		
4/7/2020	<0.001015			
4/8/2020		<0.001015	<0.001015	<0.001015
7/14/2020	<0.001015	<0.001015	<0.001015	
7/15/2020				<0.001015
2/23/2021	<0.001015	<0.001015	<0.001015	<0.001015
7/20/2021		<0.001015	<0.001015	<0.001015
7/21/2021	<0.001015			
1/31/2022	<0.001015	<0.001015	<0.001015	
2/1/2022				<0.001015
7/6/2022	<0.001015	<0.001015	<0.001015	<0.001015
2/21/2023	<0.001015		<0.001015	<0.001015
2/22/2023		<0.001015		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.005	<0.005	<0.000203
4/26/2016	<0.005			
6/20/2016	<0.005	<0.005		<0.000203
6/22/2016			<0.005	
8/8/2016	<0.005	<0.005		
8/9/2016			<0.005	<0.000203
8/24/2016	<0.005	<0.005	<0.005	<0.000203
10/3/2016	<0.005	<0.005		<0.000203
10/4/2016			<0.005	
10/26/2016	<0.005	<0.005	<0.005	<0.000203
11/21/2016	<0.005	0.00111 (J)	<0.005	<0.000203
1/17/2017	<0.005	<0.005		
1/18/2017			<0.005	<0.000203
3/22/2017	<0.005	<0.005	0.00122 (J)	<0.000203
4/18/2017	<0.005	<0.005	<0.005	<0.000203
5/30/2017	<0.005			
5/31/2017		<0.005	<0.005	<0.000203
2/13/2018	<0.005	<0.005	<0.005	<0.000203
5/22/2018	<0.005	<0.005		
5/23/2018				<0.000203
5/24/2018			<0.005	
6/12/2018	<0.005	<0.005	0.00103 (J)	<0.000203
10/17/2018	<0.005	<0.005	0.00133 (J)	<0.000203
11/19/2018	<0.005	<0.005	0.0012 (J)	<0.000203
4/10/2019	<0.005	<0.005	<0.005	<0.000203
5/14/2019	<0.005	<0.005	<0.005	<0.000203
10/8/2019	<0.005	<0.005	0.0048 (J)	
10/10/2019				<0.000203
10/16/2019	<0.005	<0.005	0.00389 (J)	<0.000203
4/6/2020	<0.005	<0.005	<0.005	<0.000203
7/13/2020	<0.005	<0.005	0.00316 (J)	
7/14/2020				<0.000203
2/22/2021	0.000403	0.000295	0.000789	0.000125 (J)
7/12/2021	0.00036	0.00036	0.00038	0.00012 (J)
1/25/2022	0.00025	0.00033	0.00027	9E-05 (J)
7/5/2022	0.000281	0.00035	0.00374	0.000118 (J)
2/20/2023	0.000275	0.000243	0.000224	
2/21/2023				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Arsenic (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.00138 (J)			
4/27/2016		0.005	<0.005	<0.005
6/21/2016	<0.005	0.00473 (J)	0.00165 (J)	0.00101 (J)
10/12/2017	<0.005	0.0051	0.00188 (J)	0.00197 (J)
10/13/2017	<0.005	0.00487 (J)	0.00181 (J)	0.00159 (J)
10/14/2017	<0.005	0.00476 (J)	0.00127 (J)	0.00126 (J)
10/15/2017	<0.005	0.00475 (J)	0.00144 (J)	0.00106 (J)
10/16/2017	<0.005	0.00482 (J)	0.00139 (J)	0.00106 (J)
10/17/2017	<0.005	0.0048 (J)	0.00138 (J)	0.00103 (J)
2/14/2018	<0.005	0.00493 (J)	0.00131 (J)	0.00185 (J)
5/23/2018	<0.005	0.0058	0.00155 (J)	0.00157 (J)
11/20/2018	<0.005	0.00542	0.00133 (J)	0.00173 (J)
5/14/2019	0.00153 (J)			
5/15/2019		0.00383 (J)	0.00138 (J)	0.00136 (J)
10/8/2019			0.00145 (J)	
10/9/2019				0.00142 (J)
10/10/2019	<0.005	0.00473 (J)		
4/7/2020	0.00163 (J)			
4/8/2020		0.00232 (J)	0.00136 (J)	0.00102 (J)
7/14/2020	<0.005	0.0048 (J)	0.00147 (J)	
7/15/2020				0.00212 (J)
2/23/2021	0.000309	0.00494	0.00141	0.00117
7/20/2021		0.00475	0.00164	0.00111
7/21/2021	0.00046			
1/31/2022	0.00019 (J)	0.00435	0.00156	
2/1/2022				0.00131
7/6/2022	0.000225	0.00554	0.00164	0.00136
2/21/2023	0.000306		0.00153	0.00119
2/22/2023		0.00337		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Barium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		0.0134	0.00803 (J)	0.0114
4/26/2016	0.00941 (J)			
6/20/2016	0.00951 (J)	0.0165		0.0103
6/22/2016			0.0101	
8/8/2016	0.00991 (J)	0.0162		
8/9/2016			0.00889 (J)	0.0119
8/24/2016	0.00949 (J)	0.0139	0.00962 (J)	0.0118
10/3/2016	0.0105	0.0164		0.0119
10/4/2016			0.00984 (J)	
10/26/2016	0.00931 (J)	0.0138	0.00878 (J)	0.0104
11/21/2016	0.00879 (J)	0.0144	0.00833 (J)	0.0106
1/17/2017	0.00929 (J)	0.0135		
1/18/2017			0.00966 (J)	0.0101
3/22/2017	0.00938 (J)	0.0132	0.00991 (J)	0.0103
4/18/2017	0.00964 (J)	0.012	0.00976 (J)	0.0107
5/30/2017	0.00982 (J)			
5/31/2017		0.0126	0.00866 (J)	0.0104
2/13/2018	0.00937 (J)	0.0127	0.00821 (J)	0.0111
5/22/2018	0.0102	0.0131		
5/23/2018				0.0107
5/24/2018			0.00977 (J)	
6/12/2018	0.0104	0.0138	0.00997 (J)	0.0108
10/17/2018	0.00952 (J)	0.0137	0.0126	0.0119
11/19/2018	0.00915 (J)	0.0115	0.0109	0.0107
4/10/2019	0.0105	0.0111	0.0101	0.0107
5/14/2019	0.00913 (J)	0.0109	0.00922 (J)	0.00949 (J)
10/8/2019	0.0109	0.0151	0.0154	
10/10/2019				0.0116
10/16/2019	0.0106	0.0146	0.0128	0.0125
4/6/2020	0.00971 (J)	0.0125	0.00931 (J)	0.0115
7/13/2020	0.0101	0.0145	0.0142	
7/14/2020				0.0122
2/22/2021	0.0107	0.0132	0.00981	0.0111
7/12/2021	0.00991	0.013	0.00857	0.0108
1/25/2022	0.0098	0.0122	0.00821	0.00908
7/5/2022	0.01	0.0116	0.0155	0.0113
2/20/2023	0.0102	0.0122	0.00822	
2/21/2023				0.0116

Time Series

Constituent: Barium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.016			
4/27/2016		0.012	0.0107	0.0108
6/21/2016	0.0112	0.0133	0.0129	0.0116
10/12/2017	0.0122	0.0134	0.014	0.0141
10/13/2017	0.0115	0.0124	0.0147	0.0148
10/14/2017	0.0099 (J)	0.0129	0.0123	0.0134
10/15/2017	0.0103	0.0136	0.0132	0.0139
10/16/2017	0.0101	0.0131	0.0122	0.0129
10/17/2017	0.00968 (J)	0.0126	0.0121	0.0126
2/14/2018	0.0114	0.0142	0.0119	0.0126
5/23/2018	0.0138	0.0145	0.0135	0.0137
11/20/2018	0.0105	0.0127	0.0116	0.0123
5/14/2019	0.0111			
5/15/2019		0.0121	0.0114	0.0122
10/8/2019			0.0145	
10/9/2019				0.0137
10/10/2019	0.0105	0.0152		
4/7/2020	0.0137			
4/8/2020		0.0128	0.0127	0.0137
7/14/2020	0.0124	0.0154	0.0148	
7/15/2020				0.0143
2/23/2021	0.0116	0.0143	0.014	0.014
7/20/2021		0.0143	0.0142	0.0141
7/21/2021	0.0116			
1/31/2022	0.0104	0.0125	0.0126	
2/1/2022				0.0135
7/6/2022	0.0117	0.0144	0.0142	0.0146
2/21/2023	0.0121		0.0141	0.0148
2/22/2023		0.0136		

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.001015	0.00122 (J)	<0.001015
4/26/2016	<0.001015			
6/20/2016	<0.001015	<0.001015		<0.001015
6/22/2016			0.00144 (J)	
8/8/2016	<0.001015	<0.001015		
8/9/2016			0.00331	<0.001015
8/24/2016	<0.001015	<0.001015	0.00308	<0.001015
10/3/2016	<0.001015	<0.001015		<0.001015
10/4/2016			0.00129 (J)	
10/26/2016	<0.001015	<0.001015	0.0071	<0.001015
11/21/2016	<0.001015	<0.001015	0.00689	<0.001015
1/17/2017	<0.001015	<0.001015		
1/18/2017			0.0169 (O)	<0.001015
3/22/2017	<0.001015	<0.001015	0.00686	<0.001015
4/18/2017	<0.001015	<0.001015	<0.001015	<0.001015
5/30/2017	<0.001015			
5/31/2017		<0.001015	0.00547	<0.001015
2/13/2018	<0.001015	<0.001015	<0.001015	<0.001015
5/22/2018	<0.001015	<0.001015		
5/23/2018				<0.001015
5/24/2018			0.00164 (J)	
6/12/2018	<0.001015	<0.001015	0.00306	<0.001015
10/17/2018	<0.001015	<0.001015	0.0121	<0.001015
11/19/2018	<0.001015	<0.001015	0.0185 (O)	<0.001015
4/10/2019	<0.001015	<0.001015	<0.001015	<0.001015
5/14/2019	<0.001015	<0.001015	<0.001015	<0.001015
10/8/2019	<0.001015	<0.001015	0.0084	
10/10/2019				<0.001015
10/16/2019	<0.001015	<0.001015	0.0103	<0.001015
4/6/2020	<0.001015	<0.001015	<0.001015	<0.001015
7/13/2020	<0.001015	<0.001015	0.0021 (J)	
7/14/2020				<0.001015
2/22/2021	<0.001015	<0.001015	<0.001015	<0.001015
7/12/2021	<0.001015	<0.001015	<0.001015	<0.001015
1/25/2022	<0.001015	<0.001015	<0.001015	<0.001015
7/5/2022	<0.001015	<0.001015	0.00139	<0.001015
2/20/2023	<0.001015	<0.001015	<0.001015	
2/21/2023				<0.001015

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Beryllium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.001015			
4/27/2016		<0.001015	<0.001015	<0.001015
6/21/2016	<0.001015	<0.001015	<0.001015	<0.001015
10/12/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/13/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/14/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/15/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/16/2017	<0.001015	<0.001015	<0.001015	<0.001015
10/17/2017	<0.001015	<0.001015	<0.001015	<0.001015
2/14/2018	<0.001015	<0.001015	<0.001015	<0.001015
5/23/2018	<0.001015	<0.001015	<0.001015	<0.001015
11/20/2018	<0.001015	<0.001015	<0.001015	<0.001015
5/14/2019	<0.001015			
5/15/2019		0.000677 (J)	<0.001015	<0.001015
10/8/2019			<0.001015	
10/9/2019				<0.001015
10/10/2019	<0.001015	<0.001015		
4/7/2020	<0.001015			
4/8/2020		0.000788 (J)	<0.001015	<0.001015
7/14/2020	<0.001015	<0.001015	<0.001015	
7/15/2020				<0.001015
2/23/2021	<0.001015	<0.001015	<0.001015	<0.001015
7/20/2021		0.00048 (J)	<0.001015	<0.001015
7/21/2021	<0.001015			
1/31/2022	<0.001015	0.00044 (J)	<0.001015	
2/1/2022				<0.001015
7/6/2022	<0.001015	<0.001015	<0.001015	<0.001015
2/21/2023	<0.001015		<0.001015	<0.001015
2/22/2023		0.00123		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		0.0241 (J)	0.028 (J)	0.0414 (J)
4/26/2016	0.0231 (J)			
6/20/2016	0.0227 (J)	0.0284 (J)		0.0434 (J)
6/22/2016			0.0433 (J)	
8/8/2016	0.0278 (J)	0.034 (J)		
8/9/2016			0.0429 (J)	0.0453 (J)
8/24/2016	0.0247 (J)	0.0316 (J)	0.0431 (J)	0.0451 (J)
10/3/2016	0.0307 (J)	0.0367 (J)		0.0511 (J)
10/4/2016			0.04 (J)	
10/26/2016	0.0241 (J)	0.0331 (J)	0.0375 (J)	0.0507 (J)
11/21/2016	0.0202 (J)	0.035 (J)	0.0406 (J)	0.0458 (J)
1/17/2017	0.0201 (J)	0.0259 (J)		
1/18/2017			0.0548 (J)	0.0445 (J)
3/22/2017	0.0224 (J)	0.0243 (J)	0.0344 (J)	0.0432 (J)
4/18/2017	<0.1015	0.0206 (J)	<0.1015	0.0409 (J)
5/30/2017	<0.1015			
5/31/2017		0.0234 (J)	0.0454 (J)	0.0392 (J)
8/23/2017	0.0253 (J)	0.0267 (J)	0.0425 (J)	0.042 (J)
5/22/2018	0.0224 (J)	0.0251 (J)		
5/23/2018				0.0433 (J)
5/24/2018			0.0339 (J)	
6/12/2018	0.0214 (J)	0.0275 (J)	0.0371 (J)	0.0478 (J)
10/17/2018	0.0216 (J)	0.0321 (J)	0.0596 (J)	0.0468 (J)
11/19/2018	0.0237 (J)	0.0324 (J)	0.0514 (J)	0.0526 (J)
4/10/2019	0.0304 (J)	<0.1015	<0.1015	0.0438 (J)
5/14/2019	<0.1015	<0.1015	<0.1015	<0.203 (o)
10/8/2019	<0.1015	0.0371 (J)	0.0537 (J)	
10/10/2019				0.0487 (J)
10/16/2019	0.0385 (J)	0.0419 (J)	0.05 (J)	0.0505 (J)
4/6/2020	<0.1015	<0.1015	<0.1015	0.0428 (J)
7/13/2020	<0.1015	<0.1015	0.0366 (J)	
7/14/2020				0.0441 (J)
2/22/2021	0.0307 (J)	<0.1015	<0.1015	0.0397 (J)
7/12/2021	<0.1015	<0.1015	<0.1015	0.0411 (J)
1/25/2022	<0.1015	<0.1015	<0.1015	0.0408 (J)
7/5/2022	<0.1015	<0.1015	0.0374 (J)	0.0433 (J)
2/20/2023	<0.1015	<0.1015	<0.1015	
2/21/2023				0.0408 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.0301 (J)			
4/27/2016		0.075 (J)	0.253 (O)	0.0662 (J)
6/21/2016	0.0304 (J)	0.0729 (J)	0.0768 (J)	0.0681 (J)
10/12/2017	0.0285 (J)	0.0806 (J)	0.0685 (J)	0.0687 (J)
10/13/2017	0.0287 (J)	0.0803 (J)	0.0674 (J)	0.0831 (J)
10/14/2017	0.0305 (J)	0.0828 (J)	0.0756 (J)	0.0702 (J)
10/15/2017	0.0319 (J)	0.0852 (J)	0.0719 (J)	0.0702 (J)
10/16/2017	0.0304 (J)	0.0858 (J)	0.0726 (J)	0.0707 (J)
10/17/2017	0.036 (J)	0.0846 (J)	0.0716 (J)	0.0695 (J)
11/16/2017	0.0377 (J)	0.0772 (J)	0.0644 (J)	0.0675 (J)
5/23/2018	0.0301 (J)	0.0757 (J)	0.0715 (J)	0.0693 (J)
11/20/2018	0.0357 (J)	0.0915 (J)	0.0772 (J)	0.0771 (J)
5/14/2019	<0.203 (o)			
5/15/2019		0.0616 (J)	0.0678 (J)	0.0689 (J)
10/8/2019			0.073 (J)	
10/9/2019				0.0723 (J)
10/10/2019	0.0323 (J)	0.0919 (J)		
4/7/2020	0.0399 (J)			
4/8/2020		0.0499 (J)	0.077 (J)	0.0683 (J)
7/14/2020	0.033 (J)	0.0838 (J)	0.0865 (J)	
7/15/2020				0.0723 (J)
2/23/2021	0.0369 (J)	0.0866 (J)	0.0803 (J)	0.0731 (J)
7/20/2021		0.0608 (J)	0.0721 (J)	0.0656 (J)
7/21/2021	0.0319 (J)			
1/31/2022	0.0314 (J)	0.0648 (J)	0.0689 (J)	
2/1/2022				0.0639 (J)
7/6/2022	0.0355 (J)	0.069 (J)	0.0752 (J)	0.0686 (J)
2/21/2023	0.0315 (J)		0.0645 (J)	0.0609 (J)
2/22/2023		0.0356 (J)		

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.0002	0.0121 (O)	<0.000203
4/26/2016	0.00196			
6/20/2016	0.0021	<0.0002		<0.000203
6/22/2016			0.00163	
8/8/2016	0.00206	<0.0002		
8/9/2016			0.00122	<0.000203
8/24/2016	0.00182	<0.0002	<0.001	<0.000203
10/3/2016	0.00188	<0.0002		<0.000203
10/4/2016			0.000689 (J)	
10/26/2016	0.00175	<0.0002	0.00136	<0.000203
11/21/2016	0.00197	<0.0002	0.00171	<0.000203
1/17/2017	0.002	0.000311 (J)		
1/18/2017			0.003	<0.000203
3/22/2017	0.0019	<0.0002	0.00473	<0.000203
4/18/2017	0.00159	<0.0002	0.00117	<0.000203
5/30/2017	0.00214			
5/31/2017		0.000212 (J)	0.00296	<0.000203
2/13/2018	0.0018	<0.0002	0.00232	<0.000203
5/22/2018	0.00201	<0.0002		
5/23/2018				<0.000203
5/24/2018			0.00459	
6/12/2018	0.00217	<0.0002	0.00351	<0.000203
10/17/2018	0.00228	<0.0002	0.00393	<0.000203
11/19/2018	0.00156	<0.0002	0.00309	<0.000203
4/10/2019	0.00224	<0.0002	0.00337	<0.000203
5/14/2019	0.00238	<0.0002	0.0013	<0.000203
10/8/2019	0.00218	<0.0002	0.00598	
10/10/2019				<0.000203
10/16/2019	0.00225	<0.0002	0.00448	<0.000203
4/6/2020	0.00184	<0.0002	0.000645 (J)	<0.000203
7/13/2020	0.00194	<0.0002	0.00885 (O)	
7/14/2020				<0.000203
2/22/2021	0.00184	8.96E-05 (J)	0.00536	8.96E-05 (J)
7/12/2021	0.00193	8E-05 (J)	0.00094	8E-05 (J)
1/25/2022	0.00196	8E-05 (J)	0.00178	<0.000203
7/5/2022	0.00211	8.4E-05 (J)	0.00835	7.5E-05 (J)
2/20/2023	0.00185	<0.0002	0.00144	
2/21/2023				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cadmium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.000203			
4/27/2016		<0.000203	<0.000203	<0.000203
6/21/2016	<0.000203	<0.000203	<0.000203	<0.000203
10/12/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/13/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/14/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/15/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/16/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/17/2017	<0.000203	<0.000203	<0.000203	<0.000203
2/14/2018	<0.000203	<0.000203	<0.000203	<0.000203
5/23/2018	<0.000203	<0.000203	<0.000203	<0.000203
11/20/2018	<0.000203	<0.000203	<0.000203	<0.000203
5/14/2019	<0.000203			
5/15/2019		0.000858 (J)	<0.000203	<0.000203
10/8/2019			<0.000203	
10/9/2019				<0.000203
10/10/2019	<0.000203	<0.000203		
4/7/2020	<0.000203			
4/8/2020		0.00204	<0.000203	<0.000203
7/14/2020	<0.000203	<0.000203	<0.000203	
7/15/2020				<0.000203
2/23/2021	<0.000203	<0.000203	<0.000203	<0.000203
7/20/2021		0.00058	<0.000203	<0.000203
7/21/2021	<0.000203			
1/31/2022	<0.000203	0.0005	<0.000203	
2/1/2022				<0.000203
7/6/2022	<0.000203	7.2E-05 (J)	<0.000203	<0.000203
2/21/2023	<0.000203		<0.000203	<0.000203
2/22/2023		0.00192		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		123	224	261
4/26/2016	147			
6/20/2016	152	168		295
6/22/2016			266	
8/8/2016	150	180		
8/9/2016			260	318
8/24/2016	142	180	274	319
10/3/2016	139	184		293
10/4/2016			243	
10/26/2016	133	171	254	311
11/21/2016	144	179	263	320
1/17/2017	131	188		
1/18/2017			431	417
3/22/2017	141	155	318	292
4/18/2017	149	156	296	302
5/30/2017	140			
5/31/2017		151	306	284
8/23/2017	152	155	298	297
5/22/2018	166	172		
5/23/2018				296
5/24/2018			297	
6/12/2018	203	179	318	355
10/17/2018	171	200	392	342
11/19/2018	154	221	387	289
4/10/2019	243	200	348	356
5/14/2019	167	168	254	254
10/8/2019	157	190	371	
10/10/2019				302
10/16/2019	157	194	346	356
4/6/2020	149	152	177	222
7/13/2020	147	163	264	
7/14/2020				259
2/22/2021	151	178	312	271
7/12/2021	149	159	252	242
1/25/2022	150	179	285	259
7/5/2022	168	172	369	294
2/20/2023	151	160	210	
2/21/2023				232

Time Series

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	399			
4/27/2016		411	198	282
6/21/2016	295	318	327	291
10/12/2017	394	421	317	300
10/13/2017	389	396	302	298
10/14/2017	391	400	283	299
10/15/2017	332	378	294	307
10/16/2017	380	402	284	299
10/17/2017	377	373	294	294
11/16/2017	368	367	299	308
5/23/2018	405	425	321	344
11/20/2018	414	449	306	327
5/14/2019	441			
5/15/2019		345	302	305
10/8/2019			294	
10/9/2019				329
10/10/2019	386	461		
4/7/2020	432			
4/8/2020		242	280	281
7/14/2020	395	406	261	
7/15/2020				280
2/23/2021	394	428	292	306
7/20/2021		348	254	281
7/21/2021	384			
1/31/2022	398	385	278	
2/1/2022				284
7/6/2022	414	430	280	306
2/21/2023	367		286	327
2/22/2023		250		

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		1.9	1.32	1.53
4/26/2016	1.94			
6/20/2016	2.09	3.43		1.85
6/22/2016			1.46	
8/8/2016	2.18	3.31		
8/9/2016			1.35	1.95
8/24/2016	2.22	3.23	1.47	2.07
10/3/2016	2.34	3.21		2.02
10/4/2016			1.59	
10/26/2016	2.34	3.35	1.27	2.07
11/21/2016	2.5	3.34	1.38	2.39
1/17/2017	2.68	3.58		
1/18/2017			1.34	1.9
3/22/2017	3.7	3.4	2	1.5 (J)
4/18/2017	2.4	2.6	2.2	1.6 (J)
5/30/2017	2.6			
5/31/2017		4.4	1.5 (J)	2.1
8/23/2017	2.7	4.4	1.8 (J)	2.3
5/22/2018	2.3	3.2		
5/23/2018				2
5/24/2018			1.6 (J)	
6/12/2018	2.3	3.7	1.4 (J)	1.7 (J)
10/17/2018	1.7 (J)	4.6	<2	1.5 (J)
11/19/2018	1.7 (J)	3	<2	<2
4/10/2019	2.36	1.76	2.25	1.88
5/14/2019	2.28	2.98	2.28	1.82
10/8/2019	2.31	4.26	1.36	
10/10/2019				1.93
10/16/2019	2.42	4.04	1.4	1.92
4/6/2020	2.01	2.43	1.72	1.5
7/13/2020	2.1	4.05	1.34	
7/14/2020				1.61
2/22/2021	2.16	1.72	2.22	1.52
7/12/2021	2.19	2.36	2.13	1.56
1/25/2022	2.09	2.14	2.12	1.54
7/5/2022	2.07	2.53	1.59	1.63
2/20/2023	2.05	1.7	1.94	
2/21/2023				1.58

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chloride, Total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	5.44			
4/27/2016		2.19	1.71	2.34
6/21/2016	6.32	2.56	2.04	2.29
10/12/2017	7.9	3.4	31	150
10/13/2017	8 (B)	3 (B)	32 (B)	130 (B)
10/14/2017	7.4	2.8	33	140
10/15/2017	7.2	1.9 (J)	34	130
10/16/2017	8.1	1.8 (J)	34	140
10/17/2017	7.9	3.1	34	140
11/16/2017	8.1	3.5	35	130
5/23/2018	7	2.6	28	75
11/20/2018	7.4	2.7	20	45
5/14/2019	6.24			
5/15/2019		4.45	15.9	52
10/8/2019			16.8	
10/9/2019				39.2
10/10/2019	7.88	3.61		
4/7/2020	4.83			
4/8/2020		4.63	10.6	24.9
7/14/2020	6.84	3.25	9.68	
7/15/2020				23.8
2/23/2021	6.19	3.47	7.85	17.9
7/20/2021		4.04	6.35	14.3
7/21/2021	6.73			
1/31/2022	6.87	4.53	6.4	
2/1/2022				8.56
7/6/2022	7.51	3.36	6.25	6.5
2/21/2023	5.25		6.12	4.86
2/22/2023		4.37		

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.001015	0.00373 (J)	<0.001015
4/26/2016	<0.01			
6/20/2016	<0.01	<0.001015		<0.001015
6/22/2016			0.00606 (J)	
8/8/2016	<0.01	<0.001015		
8/9/2016			<0.01	<0.001015
8/24/2016	<0.01	<0.001015	<0.01	<0.001015
10/3/2016	<0.01	<0.001015		<0.001015
10/4/2016			<0.01	
10/26/2016	<0.01	<0.001015	<0.01	<0.001015
11/21/2016	<0.01	<0.001015	<0.01	<0.001015
1/17/2017	<0.01	<0.001015		
1/18/2017			<0.01	<0.001015
3/22/2017	<0.01	<0.001015	0.00945 (J)	<0.001015
4/18/2017	<0.01	<0.001015	0.0105	<0.001015
5/30/2017	<0.01			
5/31/2017		<0.001015	<0.01	<0.001015
2/13/2018	<0.01	<0.001015	<0.01	<0.001015
5/22/2018	<0.01	<0.001015		
5/23/2018				<0.001015
5/24/2018			<0.01	
6/12/2018	<0.01	<0.001015	<0.01	<0.001015
10/17/2018	<0.01	<0.001015	<0.01	<0.001015
11/19/2018	<0.01	<0.001015	<0.01	<0.001015
4/10/2019	<0.01	<0.001015	<0.01	<0.001015
5/14/2019	<0.01	<0.001015	<0.01	<0.001015
10/8/2019	<0.01	<0.001015	<0.01	
10/10/2019				<0.001015
10/16/2019	<0.01	<0.001015	<0.01	<0.001015
4/6/2020	<0.01	<0.001015	<0.01	<0.001015
7/13/2020	<0.01	<0.001015	<0.01	
7/14/2020				<0.001015
2/22/2021	0.000382 (J)	<0.001015	0.00035 (J)	<0.001015
7/12/2021	0.00049 (J)	0.00025 (J)	0.00031 (J)	0.0003 (J)
1/25/2022	0.00043 (J)	0.00022 (J)	0.00051 (J)	0.00021 (J)
7/5/2022	0.000364 (J)	<0.001015	0.00025 (J)	<0.001015
2/20/2023	0.000409 (J)	0.00033 (J)	0.000384 (J)	
2/21/2023				0.000244 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Chromium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.001015			
4/27/2016		<0.00102	<0.001015	<0.001015
6/21/2016	<0.001015	<0.00102	<0.001015	<0.001015
10/12/2017	<0.001015	<0.00102	<0.001015	<0.001015
10/13/2017	<0.001015	<0.00102	<0.001015	<0.001015
10/14/2017	<0.001015	<0.00102	<0.001015	<0.001015
10/15/2017	<0.001015	<0.00102	<0.001015	<0.001015
10/16/2017	<0.001015	<0.00102	<0.001015	<0.001015
10/17/2017	<0.001015	<0.00102	<0.001015	<0.001015
2/14/2018	<0.001015	<0.00102	<0.001015	<0.001015
5/23/2018	<0.001015	<0.00102	<0.001015	<0.001015
11/20/2018	<0.001015	<0.00102	<0.001015	<0.001015
5/14/2019	<0.001015			
5/15/2019		<0.00102	<0.001015	<0.001015
10/8/2019			<0.001015	
10/9/2019				<0.001015
10/10/2019	<0.001015	<0.00102		
4/7/2020	<0.001015			
4/8/2020		<0.00102	<0.001015	<0.001015
7/14/2020	<0.001015	<0.00102	<0.001015	
7/15/2020				<0.001015
2/23/2021	<0.001015	<0.00102	<0.001015	<0.001015
7/20/2021		<0.00102	<0.001015	<0.001015
7/21/2021	<0.001015			
1/31/2022	0.00027 (J)	0.00024 (J)	0.00032 (J)	
2/1/2022				0.00025 (J)
7/6/2022	<0.001015	0.000284 (J)	<0.001015	<0.001015
2/21/2023	<0.001015		<0.001015	<0.001015
2/22/2023		0.000301 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		0.0487	0.232	<0.000203
4/26/2016	0.0343			
6/20/2016	0.0413	0.0767		<0.000203
6/22/2016			0.332	
8/8/2016	0.0513	0.103		
8/9/2016			0.311	<0.000203
8/24/2016	0.0471	0.093	0.271	<0.000203
10/3/2016	0.0525	0.0964		<0.000203
10/4/2016			0.148	
10/26/2016	0.0527	0.0904	0.236	<0.000203
11/21/2016	0.0569	0.0857	0.241	<0.000203
1/17/2017	0.0768	0.0745		
1/18/2017			0.347	<0.000203
3/22/2017	0.0535	0.0328	0.271	<0.000203
4/18/2017	0.0442	0.0242	0.00324 (J)	<0.000203
5/30/2017	0.0465			
5/31/2017		0.0441	0.225	<0.000203
2/13/2018	0.062	0.0179	0.00661 (J)	<0.000203
5/22/2018	0.0443	0.028		
5/23/2018				<0.000203
5/24/2018			0.158	
6/12/2018	0.0512	0.0366	0.291	<0.000203
10/17/2018	0.0751	0.0745	0.49	<0.000203
11/19/2018	0.0825	0.0225	0.386	<0.000203
4/10/2019	0.0445	0.0152	0.0144	<0.000203
5/14/2019	0.0485	0.0222	0.00536	<0.000203
10/8/2019	0.0778	0.0674	1.07 (o)	
10/10/2019				<0.000203
10/16/2019	0.08	0.073	0.848 (o)	<0.000203
4/6/2020	0.0417	0.0116	<0.005	<0.000203
7/13/2020	0.0532	0.0405	0.47	
7/14/2020				<0.000203
2/22/2021	0.0657	0.0161	0.0515	<0.000203
7/12/2021	0.0556	0.0155	0.00567	<0.000203
1/25/2022	0.0654	0.0166	0.0051	<0.000203
7/5/2022	0.0627	0.0184	0.195	<0.000203
2/20/2023	0.0665	0.0187	0.00435	
2/21/2023				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Cobalt (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.00287 (J)			
4/27/2016		0.0287	<0.01	0.00436 (J)
6/21/2016	0.00228 (J)	0.0269	<0.01	0.00484 (J)
10/12/2017	<0.005	0.0279	0.00269 (J)	0.005 (J)
10/13/2017	<0.005	0.0271	0.00341 (J)	0.0052 (J)
10/14/2017	<0.005	0.0296	0.00451 (J)	0.00513 (J)
10/15/2017	0.00203 (J)	0.0303	0.00371 (J)	0.00518 (J)
10/16/2017	<0.005	0.0274	0.00371 (J)	0.00453 (J)
10/17/2017	<0.005	0.0274	0.0035 (J)	0.00463 (J)
2/14/2018	<0.005	0.0305	<0.01	0.00441 (J)
5/23/2018	<0.005	0.0409	<0.01	0.00466 (J)
11/20/2018	<0.005	0.0327	0.00306 (J)	0.00551
5/14/2019	<0.005			
5/15/2019		0.265	0.00234 (J)	0.00643
10/8/2019			0.00408 (J)	
10/9/2019				0.00864
10/10/2019	<0.005	0.0425		
4/7/2020	<0.005			
4/8/2020		0.479	0.00394 (J)	0.00762
7/14/2020	<0.005	0.0916	0.00653	
7/15/2020				0.00821
2/23/2021	0.00102	0.0771	0.00294	0.00796
7/20/2021		0.216	0.00561	0.00714
7/21/2021	0.00127			
1/31/2022	0.00094	0.174	0.00546	
2/1/2022				0.0075
7/6/2022	0.000538	0.0675	0.0059	0.00701
2/21/2023	0.00091		0.0043	0.00682
2/22/2023		0.567		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016			0.484 (U)	0.434 (U)
4/26/2016	0.622			
5/5/2016		-0.0718 (U)		
6/20/2016	0.159 (U)	0.295 (U)		0.287 (U)
6/22/2016			0.2 (U)	
8/8/2016	0.511 (U)	0.231 (U)		
8/9/2016			0.378 (U)	0.516 (U)
8/24/2016	0.566 (U)	0.65	0.131 (U)	0.266 (U)
10/3/2016	0.537 (U)	0.845		0.59 (U)
10/4/2016			0.514 (U)	
10/26/2016	0.636	0.994	0.755	0.164 (U)
11/21/2016	0.807	0.537 (U)	0.7	0.296 (U)
1/17/2017	0.308 (U)	-0.0159 (U)		
1/18/2017			0.606	0.0267 (U)
3/22/2017	0.344 (U)	0.279 (U)	0.927	0.132 (U)
4/18/2017	0.934	0.32 (U)	0.334 (U)	-0.0439 (U)
5/30/2017	0.149 (U)			
5/31/2017		0.178 (U)	0.8	0.3 (U)
2/13/2018	0.774	0.804	0.649	0.69
5/22/2018	-0.091 (U)	0.0077 (U)		
5/23/2018				0.186 (U)
5/24/2018			0.448 (U)	
6/12/2018	1.18	-0.315 (U)	0.234 (U)	0.153 (U)
10/17/2018	0.553 (U)	0.574 (U)	0.852	0.313 (U)
11/19/2018	0.862	0.654	0.521	0.794
5/14/2019	0.509	0.579	0.176 (U)	0.352 (U)
10/8/2019	1.47	0.493 (U)	0.833 (U)	
10/10/2019				1.02 (U)
10/16/2019	0.204 (U)	0.046 (U)	0.0279 (U)	0.356 (U)
4/6/2020	0.309 (U)	0.212 (U)	0.569 (U)	0.459 (U)
7/13/2020	0.219 (U)	0.0814 (U)	0.53	
7/14/2020				0.169 (U)
2/22/2021	0.677 (U)	0.434 (U)	0.472 (U)	0 (U)
7/12/2021	0.476 (U)	0.155 (U)	0.114 (U)	0.301 (U)
1/25/2022	1.01 (U)	0.663 (U)	0.418 (U)	0.884 (U)
7/5/2022	1.49	1.31	1.33	1.1
2/20/2023	0.36 (U)	0.837 (U)	0.234 (U)	
2/21/2023				0.3 (U)

Time Series

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.611			
4/27/2016		0.956	0.374 (U)	-0.207 (U)
6/21/2016	0.304 (U)	0.748	0.151 (U)	0.529
10/12/2017	0.627 (U)	0.564 (U)	0.182 (U)	0.267 (U)
10/13/2017	0.391 (U)	1.36 (U)	0.517 (U)	0.873 (U)
10/14/2017	1.2 (U)	1.59 (U)	0.43 (U)	1.6 (U)
10/15/2017	0.806 (U)	1.22 (U)	0.45 (U)	0.327 (U)
10/16/2017	0.564 (U)	1.57 (U)	0.55 (U)	0.524 (U)
10/17/2017	0.178 (U)	0.631 (U)	0.474 (U)	0.0455 (U)
2/14/2018	0.955	0.969	0.736	0.633
5/23/2018	0.543	0.918	0.0192 (U)	0.377 (U)
11/20/2018	0.687	1.15	0.494	0.28 (U)
5/14/2019	0.663			
5/15/2019		1.56	0.61	0.697
10/8/2019			0.345 (U)	
10/9/2019				0.416 (U)
10/10/2019	0.811 (U)	1.71		
4/7/2020	0.48 (U)			
4/8/2020		0.179 (U)	0.237 (U)	1.38 (U)
7/14/2020	0.521	0.578	0.434	
7/15/2020				0.398 (U)
2/23/2021	0.71 (U)	1.15 (U)	0.696 (U)	0.685 (U)
7/20/2021		1.32	0.356 (U)	0.42 (U)
7/21/2021	0.79 (U)			
1/31/2022	0.0523 (U)	0.374 (U)	0.473 (U)	
2/1/2022				0.643 (U)
7/6/2022	0.747 (U)	1.56	0.716 (U)	0.415 (U)
2/21/2023	0.275 (U)		0.789 (U)	2.19
2/22/2023		3.75		

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		0.149 (J)	0.243 (J)	0.372
4/26/2016	0.146 (J)			
6/20/2016	0.148 (J)	0.148 (J)		0.361
6/22/2016			0.269 (J)	
8/8/2016	0.137 (J)	0.134 (J)		
8/9/2016			0.363	0.326
8/24/2016	0.133 (J)	0.129 (J)	0.346	0.329
10/3/2016	0.103 (J)	0.086 (J)		0.287 (J)
10/4/2016			0.266 (J)	
10/26/2016	0.05 (J)	0.027 (J)	0.266 (J)	0.194 (J)
11/21/2016	0.047 (J)	0.027 (J)	0.244 (J)	0.192 (J)
1/17/2017	0.09 (J)	0.066 (J)		
1/18/2017			0.385	0.223 (J)
3/22/2017	0.12	0.13	0.41	0.32
4/18/2017	0.12	0.16	0.29	0.32
5/30/2017	0.13			
5/31/2017		0.13	0.37	0.31
8/23/2017	0.16	0.16	0.55	0.38
2/13/2018	0.14	0.22	0.27	0.38
5/22/2018	0.16	0.17		
5/23/2018				0.38
5/24/2018			0.6	
6/12/2018	0.16	0.16	0.53	0.39
10/17/2018	0.18	0.16	0.63	0.39
11/19/2018	0.15	0.18	0.31	0.36
4/10/2019	0.102	0.262	0.273	0.384
5/14/2019	0.119	0.17	0.281	0.335
10/8/2019	0.0924 (J)	0.164	0.225	
10/10/2019				0.304
10/16/2019	0.0756 (J)	0.114	0.106	0.302
4/6/2020	0.101	0.207	0.314	0.368
7/13/2020	0.0678 (J)	0.132	0.13	
7/14/2020				0.33
2/22/2021	0.082 (J)	0.209	0.246	0.357
7/12/2021	0.125	0.196	0.287	0.35
1/25/2022	0.101	0.204	0.325	0.364
7/5/2022	0.11 (J)	0.2	0.386	0.362
2/20/2023	0.221	0.267	0.379	
2/21/2023				0.415

Time Series

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.307			
4/27/2016		0.131 (J)	0.2 (J)	0.212 (J)
6/21/2016	0.337	0.153 (J)	0.163 (J)	0.211 (J)
10/12/2017	0.35	0.15	0.17	0.22
10/13/2017	0.36	0.15	0.19	0.23
10/14/2017	0.37	0.14	0.2	0.22
10/15/2017	0.37	0.14	0.2	0.22
10/16/2017	0.36	0.14	0.2	0.22
10/17/2017	0.35	0.14	0.19	0.21
11/16/2017	0.37	0.14	0.18	0.22
2/14/2018	0.33	0.13	0.18	0.21
5/23/2018	0.29	0.13	0.18	0.21
11/20/2018	0.32	0.14	0.19	0.21
5/14/2019	0.22			
5/15/2019		0.133	0.169	0.192
10/8/2019			0.183	
10/9/2019				0.189
10/10/2019	0.338	0.124		
4/7/2020	0.225			
4/8/2020		<0.1 (o)	0.153	0.192
7/14/2020	0.263	0.115	0.193	
7/15/2020				0.196
2/23/2021	0.287	0.139	0.2	0.208
7/20/2021		0.131	0.286	0.262
7/21/2021	0.331			
1/31/2022	0.291	0.121	0.173	
2/1/2022				0.177
7/6/2022	0.306	0.147	0.208	0.173
2/21/2023	0.319		0.216	0.212
2/22/2023		0.173		

Time Series

Constituent: Lead (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.0002	<0.0002	<0.000203
4/26/2016	<0.0002			
6/20/2016	<0.0002	<0.0002		<0.000203
6/22/2016			<0.0002	
8/8/2016	<0.0002	<0.0002		
8/9/2016			<0.0002	<0.000203
8/24/2016	<0.0002	<0.0002	<0.0002	<0.000203
10/3/2016	<0.0002	<0.0002		<0.000203
10/4/2016			<0.0002	
10/26/2016	<0.0002	<0.0002	<0.0002	<0.000203
11/21/2016	<0.0002	<0.0002	<0.0002	<0.000203
1/17/2017	<0.0002	<0.0002		
1/18/2017			<0.0002	<0.000203
3/22/2017	<0.0002	<0.0002	<0.0002	<0.000203
4/18/2017	<0.0002	<0.0002	<0.0002	<0.000203
5/30/2017	<0.0002			
5/31/2017		<0.0002	<0.0002	<0.000203
2/13/2018	<0.0002	<0.0002	<0.0002	<0.000203
5/22/2018	<0.0002	<0.0002		
5/23/2018				<0.000203
5/24/2018			<0.0002	
6/12/2018	<0.0002	<0.0002	<0.0002	<0.000203
10/17/2018	<0.0002	<0.0002	0.00102 (J)	<0.000203
11/19/2018	<0.0002	<0.0002	0.00692 (o)	<0.000203
4/10/2019	<0.0002	<0.0002	<0.0002	<0.000203
5/14/2019	<0.0002	<0.0002	<0.0002	<0.000203
10/8/2019	<0.0002	<0.0002	<0.0002	
10/10/2019				<0.000203
10/16/2019	<0.0002	<0.0002	0.00108 (J)	<0.000203
4/6/2020	<0.0002	<0.0002	<0.0002	<0.000203
7/13/2020	<0.0002	<0.0002	<0.0002	
7/14/2020				<0.000203
2/22/2021	<0.0002	<0.0002	8.8E-05 (J)	<0.000203
7/12/2021	<0.0002	<0.0002	8E-05 (J)	<0.000203
1/25/2022	<0.0002	<0.0002	<0.0002	<0.000203
7/5/2022	<0.0002	<0.0002	7.3E-05 (J)	<0.000203
2/20/2023	<0.0002	<0.0002	<0.0002	
2/21/2023				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lead (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.000203			
4/27/2016		<0.0002	<0.000203	<0.000203
6/21/2016	<0.000203	<0.0002	<0.000203	<0.000203
10/12/2017	<0.000203	<0.0002	<0.000203	<0.000203
10/13/2017	<0.000203	<0.0002	<0.000203	<0.000203
10/14/2017	<0.000203	<0.0002	<0.000203	<0.000203
10/15/2017	<0.000203	<0.0002	<0.000203	<0.000203
10/16/2017	<0.000203	<0.0002	<0.000203	<0.000203
10/17/2017	<0.000203	<0.0002	<0.000203	<0.000203
2/14/2018	<0.000203	<0.0002	<0.000203	<0.000203
5/23/2018	<0.000203	<0.0002	<0.000203	<0.000203
11/20/2018	<0.000203	<0.0002	<0.000203	<0.000203
5/14/2019	<0.000203			
5/15/2019		<0.0002	<0.000203	<0.000203
10/8/2019			<0.000203	
10/9/2019				<0.000203
10/10/2019	<0.000203	<0.0002		
4/7/2020	<0.000203			
4/8/2020		<0.0002	<0.000203	<0.000203
7/14/2020	<0.000203	<0.0002	<0.000203	
7/15/2020				<0.000203
2/23/2021	<0.000203	<0.0002	<0.000203	<0.000203
7/20/2021		<0.0002	<0.000203	9E-05 (J)
7/21/2021	<0.000203			
1/31/2022	<0.000203	<0.0002	<0.000203	
2/1/2022				9E-05 (J)
7/6/2022	<0.000203	0.000232	<0.000203	0.000109 (J)
2/21/2023	<0.000203		<0.000203	8.8E-05 (J)
2/22/2023		0.000457		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		0.0353 (J)	0.0964	0.0528
4/26/2016	0.0264 (J)			
6/20/2016	0.0246 (J)	0.0583		0.0554
6/22/2016			0.156	
8/8/2016	0.0229 (J)	0.0627		
8/9/2016			0.122	0.0452 (J)
8/24/2016	0.0236 (J)	0.0651	0.138	0.0488 (J)
10/3/2016	0.0229 (J)	0.0622		0.0476 (J)
10/4/2016			0.0966	
10/26/2016	0.0227 (J)	0.0293 (J)	0.134	0.049 (J)
11/21/2016	0.0236 (J)	0.0667	0.167	0.0477 (J)
1/17/2017	0.0228 (J)	0.0636		
1/18/2017			0.237	0.045 (J)
3/22/2017	0.0238 (J)	0.0464 (J)	0.203	0.0493 (J)
4/18/2017	0.0242 (J)	0.0446 (J)	0.0764	0.0494 (J)
5/30/2017	0.0229 (J)			
5/31/2017		0.0496 (J)	0.218	0.0501
2/13/2018	0.0233 (J)	0.0615	0.0964	0.0446 (J)
5/22/2018	0.0263 (J)	0.0465 (J)		
5/23/2018				0.0513
5/24/2018			0.145	
6/12/2018	0.0251 (J)	0.0472 (J)	0.194	0.0511
10/17/2018	0.025 (J)	0.0633	0.384	0.0532
11/19/2018	0.0241	0.0584	0.323	0.0467
4/10/2019	0.0285	0.0574	0.0905	0.0504
5/14/2019	0.026 (J)	0.0445	0.0828	0.0485
10/8/2019	0.0268	0.0677	0.419	
10/10/2019				0.054
10/16/2019	0.0263	0.0661	0.337	0.052
4/6/2020	0.0278	0.0496	0.0689	0.0519
7/13/2020	0.028	0.0615	0.256	
7/14/2020				0.0543
2/22/2021	0.0301	0.0625	0.126	0.0558
7/12/2021	0.0266	0.0495	0.0808	0.0533
1/25/2022	0.0239	0.051	0.077	0.0433
7/5/2022	0.0274	0.0469	0.251	0.0566
2/20/2023	0.0241	0.0412	0.0649	
2/21/2023				0.0424

Time Series

Constituent: Lithium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	0.0977			
4/27/2016		0.253	0.163	0.171
6/21/2016	0.0972	0.253	0.171	0.181
10/12/2017	0.093	0.249	0.134	0.182
10/13/2017	0.0935	0.249	0.127	0.189
10/14/2017	0.0931	0.244	0.112	0.177
10/15/2017	0.0968	0.259	0.129	0.191
10/16/2017	0.0963	0.259	0.122	0.189
10/17/2017	0.0949	0.249	0.122	0.184
2/14/2018	0.0989	0.242	0.131	0.183
5/23/2018	0.103	0.266	0.129	0.194
11/20/2018	0.102	0.245	0.12	0.181
5/14/2019	0.116			
5/15/2019		0.152	0.127	0.16
10/8/2019			0.131	
10/9/2019				0.163
10/10/2019	0.0981	0.251		
4/7/2020	0.133			
4/8/2020		0.0489	0.117	0.149
7/14/2020	0.11	0.223	0.103	
7/15/2020				0.152
2/23/2021	0.133	0.253	0.131	0.166
7/20/2021		0.18	0.096	0.151
7/21/2021	0.113			
1/31/2022	0.0932	0.161	0.0907	
2/1/2022				0.124
7/6/2022	0.101	0.216	0.0926	0.132
2/21/2023	0.104		0.0932	0.12
2/22/2023		0.0329		

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.0005	<0.0005	<0.0005
4/26/2016	<0.0005			
6/20/2016	<0.0005	<0.0005		<0.0005
6/22/2016			<0.0005	
8/8/2016	<0.0005	<0.0005		
8/9/2016			<0.0005	<0.0005
8/24/2016	<0.0005	<0.0005	<0.0005	<0.0005
10/3/2016	<0.0005	<0.0005		<0.0005
10/4/2016			<0.0005	
10/26/2016	<0.0005	<0.0005	<0.0005	<0.0005
11/21/2016	<0.0005	<0.0005	<0.0005	<0.0005
1/17/2017	<0.0005	<0.0005		
1/18/2017			<0.0005	<0.0005
3/22/2017	<0.0005	<0.0005	<0.0005	<0.0005
4/18/2017	<0.0005	<0.0005	<0.0005	<0.0005
5/30/2017	<0.0005			
5/31/2017		<0.0005	<0.0005	<0.0005
2/13/2018	<0.0005	<0.0005	<0.0005	<0.0005
5/22/2018	<0.0005	<0.0005		
5/23/2018				<0.0005
5/24/2018			<0.0005	
6/12/2018	<0.0005	<0.0005	<0.0005	<0.0005
10/17/2018	<0.0005	<0.0005	<0.0005	<0.0005
11/19/2018	<0.0005	<0.0005	<0.0005	<0.0005
4/10/2019	<0.0005	<0.0005	<0.0005	<0.0005
5/14/2019	<0.0005	<0.0005	<0.0005	<0.0005
10/8/2019	<0.0005	<0.0005	<0.0005	
10/10/2019				<0.0005
10/16/2019	<0.0005	<0.0005	<0.0005	<0.0005
4/6/2020	<0.0005	<0.0005	<0.0005	<0.0005
7/13/2020	<0.0005	<0.0005	<0.0005	
7/14/2020				<0.0005
2/22/2021	<0.0005	<0.0005	<0.0005	<0.0005
7/12/2021	<0.0005	<0.0005	<0.0005	<0.0005
1/25/2022	<0.0005	<0.0005	<0.0005	<0.0005
7/5/2022	<0.0005	<0.0005	<0.0005	<0.0005
2/20/2023	<0.0005	<0.0005	<0.0005	
2/21/2023				<0.0005

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Mercury (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.0005			
4/27/2016		<0.0005	<0.0005	<0.0005
6/21/2016	<0.0005	<0.0005	<0.0005	<0.0005
10/12/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/13/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/14/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/15/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/16/2017	<0.0005	<0.0005	<0.0005	<0.0005
10/17/2017	<0.0005	<0.0005	<0.0005	<0.0005
2/14/2018	<0.0005	<0.0005	<0.0005	<0.0005
5/23/2018	<0.0005	<0.0005	<0.0005	<0.0005
11/20/2018	<0.0005	<0.0005	<0.0005	<0.0005
5/14/2019	<0.0005			
5/15/2019		<0.0005	<0.0005	<0.0005
10/8/2019			<0.0005	
10/9/2019				<0.0005
10/10/2019	<0.0005	<0.0005		
4/7/2020	<0.0005			
4/8/2020		<0.0005	<0.0005	<0.0005
7/14/2020	<0.0005	<0.0005	<0.0005	
7/15/2020				<0.0005
2/23/2021	<0.0005	<0.0005	<0.0005	<0.0005
7/20/2021		<0.0005	<0.0005	<0.0005
7/21/2021	<0.0005			
1/31/2022	<0.0005	<0.0005	<0.0005	
2/1/2022				<0.0005
7/6/2022	<0.0005	<0.0005	<0.0005	<0.0005
2/21/2023	<0.0005		<0.0005	<0.0005
2/22/2023		<0.0005		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.0002	<0.0002	<0.01
4/26/2016	<0.0002			
6/20/2016	<0.0002	<0.0002		<0.01
6/22/2016			<0.0002	
8/8/2016	<0.0002	<0.0002		
8/9/2016			<0.0002	<0.01
8/24/2016	<0.0002	<0.0002	<0.0002	<0.01
10/3/2016	<0.0002	<0.0002		<0.01
10/4/2016			<0.0002	
10/26/2016	<0.0002	<0.0002	<0.0002	<0.01
11/21/2016	<0.0002	<0.0002	<0.0002	<0.01
1/17/2017	<0.0002	<0.0002		
1/18/2017			<0.0002	<0.01
3/22/2017	<0.0002	<0.0002	<0.0002	<0.01
4/18/2017	<0.0002	<0.0002	<0.0002	<0.01
5/30/2017	<0.0002			
5/31/2017		<0.0002	<0.0002	<0.01
2/13/2018	<0.0002	<0.0002	<0.0002	<0.01
5/22/2018	<0.0002	<0.0002		
5/23/2018				<0.01
5/24/2018			<0.0002	
6/12/2018	<0.0002	<0.0002	<0.0002	<0.01
10/17/2018	<0.0002	<0.0002	<0.0002	<0.01
11/19/2018	<0.0002	<0.0002	<0.0002	<0.01
4/10/2019	<0.0002	<0.0002	<0.0002	<0.01
5/14/2019	<0.0002	<0.0002	<0.0002	<0.01
10/8/2019	<0.0002	<0.0002	<0.0002	
10/10/2019				<0.01
10/16/2019	<0.0002	<0.0002	<0.0002	<0.01
4/6/2020	<0.0002	<0.0002	<0.0002	<0.01
7/13/2020	<0.0002	<0.0002	<0.0002	
7/14/2020				<0.01
2/22/2021	<0.0002	<0.0002	<0.0002	0.000131 (J)
7/12/2021	<0.0002	<0.0002	<0.0002	0.00014 (J)
1/25/2022	<0.0002	<0.0002	8E-05 (J)	0.00011 (J)
7/5/2022	<0.0002	<0.0002	<0.0002	0.000108 (J)
2/20/2023	<0.0002	<0.0002	<0.0002	
2/21/2023				0.00015 (J)

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Molybdenum (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.01			
4/27/2016		<0.000203	<0.01	<0.01
6/21/2016	<0.01	<0.000203	<0.01	<0.01
10/12/2017	<0.01	<0.000203	<0.01	<0.01
10/13/2017	<0.01	<0.000203	<0.01	<0.01
10/14/2017	<0.01	<0.000203	<0.01	<0.01
10/15/2017	<0.01	<0.000203	<0.01	<0.01
10/16/2017	<0.01	<0.000203	<0.01	<0.01
10/17/2017	<0.01	<0.000203	<0.01	<0.01
2/14/2018	<0.01	<0.000203	<0.01	<0.01
5/23/2018	<0.01	<0.000203	<0.01	<0.01
11/20/2018	<0.01	<0.000203	<0.01	<0.01
5/14/2019	<0.01			
5/15/2019		<0.000203	<0.01	<0.01
10/8/2019			<0.01	
10/9/2019				<0.01
10/10/2019	<0.01	<0.000203		
4/7/2020	<0.01			
4/8/2020		<0.000203	<0.01	<0.01
7/14/2020	<0.01	<0.000203	<0.01	
7/15/2020				<0.01
2/23/2021	0.0014	0.000285	0.00107	0.0129
7/20/2021		7E-05 (J)	0.00086	0.00033
7/21/2021	0.00126			
1/31/2022	0.00126	7E-05 (J)	0.00093	
2/1/2022				0.00031
7/6/2022	0.00104	0.000316	0.000846	0.000351
2/21/2023	0.000945		0.00103	0.000338
2/22/2023		<0.000203		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: pH, Field (SU) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		5.94	5.56	6.22
4/26/2016	5.2			
6/20/2016	5.18	5.96		6.21
6/22/2016			5.57	
8/8/2016	5.12	5.88		
8/9/2016			5.67	6.11
8/24/2016			5.63	6.11
10/3/2016	5.21	5.91		6.13
10/4/2016			5.69	
10/26/2016	5.2	5.84	5.56	6.12
11/21/2016	5.19	5.82	5.42	6.09
1/17/2017	5.17	5.87		
1/18/2017			5.11	6.09
3/22/2017	5.2	6.01	4.52	6.15
4/18/2017	5.2	6.02	5.84	6.19
5/30/2017	5.14			
5/31/2017		5.85	4.56	6.13
8/23/2017	5.12	5.89	4.77	6.12
2/13/2018	5.18	6.21	5.67	6.22
5/22/2018	5.2	6.04		
5/23/2018				6.21
5/24/2018			5.19	
6/12/2018	5.15	5.95	4.79	6.16
10/17/2018	5.12	5.9	4.75	6.12
11/19/2018	5.09	6.03	3.77 (o)	6.16
4/10/2019	5.11	6.1	5.54	6.14
5/14/2019	5.19	6.07	5.71	6.23
10/8/2019	5.12	5.96	4.98	
10/10/2019				6.15
10/16/2019	5.16	5.98	4.51	6.19
4/6/2020	5.21	6.21	5.91	6.35
7/13/2020	5.14	5.84	5.16	
7/14/2020				6.2
2/22/2021	5.06	6.1	5.59	6.19
7/12/2021	5.13	6.16	5.86	6.06
1/25/2022	5.11	6.22	5.9	6.3
7/5/2022	5.01	6.15	5.34	6.12
2/20/2023	5.07	6.24	6.01	
2/21/2023				6.35

Time Series

Constituent: pH, Field (SU) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	6.37			
4/27/2016		6.18	6.6	6.55
6/21/2016	6.35	6.23	6.62	6.47
10/12/2017	6.38	6.22	6.64	6.5
10/13/2017	6.43	6.23	6.64	6.51
10/14/2017	6.41	6.22	6.66	6.53
10/15/2017	6.42	6.22	6.67	6.53
10/16/2017	6.42	6.21	6.67	6.54
10/17/2017	6.41	6.2	6.66	6.54
11/16/2017	6.53	6.28	6.62	6.51
2/14/2018	6.39	6.17	6.67	6.55
5/23/2018	6.39	6.12	6.63	6.52
11/20/2018	6.39	6.14	6.61	6.58
5/14/2019	6.34			
5/15/2019		5.72	6.61	6.6
10/8/2019			6.52	
10/9/2019				6.67
10/10/2019	6.43	6.16		
4/7/2020	6.43			
4/8/2020		4.98	6.64	6.7
7/14/2020	6.48	6.12	6.52	
7/15/2020				6.71
2/23/2021	6.47	6.13	6.7	6.73
7/20/2021		5.99	6.58	6.64
7/21/2021	6.4			
1/31/2022	6.52	6.1	6.48	
2/1/2022				6.77
7/6/2022	6.51	6.14	6.46	6.72
2/21/2023	6.5		6.72	6.75
2/22/2023		4.98		

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.00102	<0.01	<0.01
4/26/2016	0.00261 (J)			
6/20/2016	0.00242 (J)	<0.00102		<0.01
6/22/2016			<0.01	
8/8/2016	0.00253 (J)	<0.00102		
8/9/2016			<0.01	<0.01
8/24/2016	<0.01	<0.00102	<0.01	<0.01
10/3/2016	0.00211 (J)	<0.00102		<0.01
10/4/2016			<0.01	
10/26/2016	<0.01	<0.00102	<0.01	<0.01
11/21/2016	<0.01	<0.00102	<0.01	<0.01
1/17/2017	<0.01	<0.00102		
1/18/2017			<0.01	<0.01
3/22/2017	0.0022 (J)	<0.00102	0.0141	<0.01
4/18/2017	0.0027 (J)	<0.00102	0.0158	<0.01
5/30/2017	0.00316 (J)			
5/31/2017		<0.00102	0.00632 (J)	<0.01
2/13/2018	0.00211 (J)	<0.00102	0.0209	0.00403 (J)
5/22/2018	0.00372 (J)	<0.00102		
5/23/2018				<0.01
5/24/2018			0.00918 (J)	
6/12/2018	0.00409 (J)	<0.00102	0.00836 (J)	<0.01
10/17/2018	<0.01	<0.00102	<0.01	<0.01
11/19/2018	<0.01	<0.00102	0.00439 (J)	0.00436 (J)
4/10/2019	0.00471 (J)	0.00322 (J)	0.0113	<0.01
5/14/2019	0.00316 (J)	<0.00102	0.0119	0.00201 (J)
10/8/2019	<0.01	<0.00102	0.00256 (J)	
10/10/2019				<0.01
10/16/2019	<0.01	<0.00102	0.00286 (J)	<0.01
4/6/2020	0.00275 (J)	<0.00102	0.01	0.00284 (J)
7/13/2020	0.00245 (J)	<0.00102	0.0134	
7/14/2020				<0.01
2/22/2021	0.00241	<0.00102	0.0181	0.00222
7/12/2021	0.0028	<0.00102	0.0133	0.00155
1/25/2022	0.00216	<0.00102	0.0154	0.00224
7/5/2022	0.00269	<0.00102	0.0205	0.000961 (J)
2/20/2023	0.00258	<0.00102	0.0123	
2/21/2023				0.00266

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Selenium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.01			
4/27/2016		<0.001015	0.00445 (J)	<0.001015
6/21/2016	<0.01	<0.001015	<0.001015	<0.001015
10/12/2017	<0.01	<0.001015	<0.001015	<0.001015
10/13/2017	<0.01	<0.001015	<0.001015	<0.001015
10/14/2017	<0.01	<0.001015	<0.001015	<0.001015
10/15/2017	0.00254 (J)	<0.001015	<0.001015	<0.001015
10/16/2017	<0.01	<0.001015	<0.001015	<0.001015
10/17/2017	0.00288 (J)	<0.001015	<0.001015	<0.001015
2/14/2018	<0.01	<0.001015	<0.001015	<0.001015
5/23/2018	<0.01	<0.001015	<0.001015	<0.001015
11/20/2018	<0.01	<0.001015	<0.001015	<0.001015
5/14/2019	<0.01			
5/15/2019		<0.001015	<0.001015	<0.001015
10/8/2019			<0.001015	
10/9/2019				<0.001015
10/10/2019	<0.01	<0.001015		
4/7/2020	<0.01			
4/8/2020		<0.001015	<0.001015	<0.001015
7/14/2020	<0.01	<0.001015	<0.001015	
7/15/2020				<0.001015
2/23/2021	0.00233	<0.001015	<0.001015	<0.001015
7/20/2021		<0.001015	<0.001015	<0.001015
7/21/2021	0.00178			
1/31/2022	0.00237	<0.001015	<0.001015	
2/1/2022				<0.001015
7/6/2022	0.0017	<0.001015	0.000677 (J)	<0.001015
2/21/2023	0.00124		<0.001015	<0.001015
2/22/2023		0.0019		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		745	1890	2260
4/26/2016	1490			
6/20/2016	1420	964		2500
6/22/2016			2100	
8/8/2016	1460	1100		
8/9/2016			2050	2750
8/24/2016	1450	1130	2190	2770
10/3/2016	1460	1140		3060
10/4/2016			1950	
10/26/2016	1330	1060	1980	2650
11/21/2016	1420	1100	2060	2720
1/17/2017	1350	1160		
1/18/2017			2620	2650
3/22/2017	1500	900	3200	2700
4/18/2017	1300	870	2500	2400
5/30/2017	1400			
5/31/2017		1100	2800	2700
8/23/2017	1500	920	2600	2700
5/22/2018	2100 (o)	1200		
5/23/2018				2400
5/24/2018			2700	
6/12/2018	1500	860	2500	2600
10/17/2018	1400	970	2700	2600
11/19/2018	1300	1000	3000	2400
4/10/2019	1700	889	2460	2090
5/14/2019	1560	948	2460	2240
10/8/2019	1540	1230	2950	
10/10/2019				2690
10/16/2019	1680	1170	2820	3050
4/6/2020	1530	786	1670	1810
7/13/2020	1450	843	2130	
7/14/2020				1970
2/22/2021	1400	864	3040	2040
7/12/2021	1560	763	2380	1930
1/25/2022	1430	842	2550	1930
7/5/2022	1600	819	3110	2380
2/20/2023	1520	767	2110	
2/21/2023				1930

Time Series

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	2390			
4/27/2016		2090	1050	1550
6/21/2016	2500	2000	1410	1470
10/12/2017	2300	2000	1400	1400
10/13/2017	2300	2000	1400	1600
10/14/2017	2300	1900	1300	1400
10/15/2017	2300	1900	1300	1400
10/16/2017	2300	1900	1300	1400
10/17/2017	2200	1900	1300	1400
11/16/2017	2200	1800	1300	1400
5/23/2018	2400	2000	1900 (O)	2100 (o)
11/20/2018	2500	2200	1100	1400
5/14/2019	2380			
5/15/2019		2110	1510	1640
10/8/2019			1570	
10/9/2019				1550
10/10/2019	2460	2330		
4/7/2020	2050			
4/8/2020		1900	1270	1380
7/14/2020	2080	1970	1330	
7/15/2020				1410
2/23/2021	2210	2010	1320	1420
7/20/2021		1930	1170	1500
7/21/2021	2240			
1/31/2022	2310	2080	1370	
2/1/2022				1500
7/6/2022	2320	2100	1330	1460
2/21/2023	2210		1450	1510
2/22/2023		1870		

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		<0.0002	0.000205 (J)	<0.000203
4/26/2016	<0.0002			
6/20/2016	<0.0002	<0.0002		<0.000203
6/22/2016			<0.0002	
8/8/2016	<0.0002	<0.0002		
8/9/2016			<0.0002	<0.000203
8/24/2016	<0.0002	<0.0002	<0.0002	<0.000203
10/3/2016	<0.0002	<0.0002		<0.000203
10/4/2016			<0.0002	
10/26/2016	<0.0002	<0.0002	0.000209 (J)	<0.000203
11/21/2016	<0.0002	<0.0002	<0.0002	<0.000203
1/17/2017	<0.0002	<0.0002		
1/18/2017			<0.0002	<0.000203
3/22/2017	<0.0002	<0.0002	<0.0002	<0.000203
4/18/2017	<0.0002	<0.0002	<0.0002	<0.000203
5/30/2017	<0.0002			
5/31/2017		<0.0002	<0.0002	<0.000203
2/13/2018	<0.0002	<0.0002	<0.0002	<0.000203
5/22/2018	<0.0002	<0.0002		
5/23/2018				<0.000203
5/24/2018			<0.0002	
6/12/2018	<0.0002	<0.0002	<0.0002	<0.000203
10/17/2018	<0.0002	<0.0002	<0.0002	<0.000203
11/19/2018	<0.0002	<0.0002	0.000226 (J)	<0.000203
4/10/2019	<0.0002	<0.0002	<0.0002	<0.000203
5/14/2019	<0.0002	<0.0002	<0.0002	<0.000203
10/8/2019	<0.0002	<0.0002	<0.0002	
10/10/2019				<0.000203
10/16/2019	<0.0002	<0.0002	<0.0002	<0.000203
4/6/2020	<0.0002	<0.0002	<0.0002	<0.000203
7/13/2020	<0.0002	<0.0002	<0.0002	
7/14/2020				<0.000203
2/22/2021	<0.0002	<0.0002	<0.0002	<0.000203
7/12/2021	<0.0002	<0.0002	<0.0002	<0.000203
1/25/2022	<0.0002	<0.0002	<0.0002	<0.000203
7/5/2022	<0.0002	<0.0002	<0.0002	<0.000203
2/20/2023	<0.0002	<0.0002	<0.0002	
2/21/2023				<0.000203

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Thallium (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	<0.000203			
4/27/2016		<0.000203	<0.000203	<0.000203
6/21/2016	<0.000203	<0.000203	<0.000203	<0.000203
10/12/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/13/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/14/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/15/2017	<0.000203	<0.000203	<0.000203	<0.000203
10/16/2017	0.000375 (J)	<0.000203	<0.000203	<0.000203
10/17/2017	<0.000203	<0.000203	<0.000203	<0.000203
2/14/2018	<0.000203	<0.000203	<0.000203	<0.000203
5/23/2018	<0.000203	<0.000203	<0.000203	<0.000203
11/20/2018	<0.000203	<0.000203	<0.000203	<0.000203
5/14/2019	<0.000203			
5/15/2019		<0.000203	<0.000203	<0.000203
10/8/2019			<0.000203	
10/9/2019				<0.000203
10/10/2019	<0.000203	<0.000203		
4/7/2020	<0.000203			
4/8/2020		<0.000203	<0.000203	<0.000203
7/14/2020	<0.000203	<0.000203	<0.000203	
7/15/2020				<0.000203
2/23/2021	<0.000203	<0.000203	<0.000203	<0.000203
7/20/2021		<0.000203	<0.000203	<0.000203
7/21/2021	<0.000203			
1/31/2022	7E-05 (J)	0.00011 (J)	<0.000203	
2/1/2022				<0.000203
7/6/2022	<0.000203	<0.000203	<0.000203	<0.000203
2/21/2023	<0.000203		<0.000203	<0.000203
2/22/2023		0.000143 (J)		

ND substitution: RL or RL/2 if <15% NDs.

Time Series

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1 (bg)	MW-2 (bg)	MW-3 (bg)	MW-4 (bg)
4/25/2016		1260	2720	3300
4/26/2016	2080			
6/20/2016	2060	1620		3870
6/22/2016			3250	
8/8/2016	2070	1740		
8/9/2016			3050	4140
8/24/2016	2040	1720	3080	4190
10/3/2016	2110	1800		4190
10/4/2016			2900	
10/26/2016	2000	1800	2940	4400
11/21/2016	2070	1740	3090	4230
1/17/2017	1930	1960		
1/18/2017			4020	4120
3/22/2017	2060	1510	4180	3980
4/18/2017	2140	1580	4440	3880
5/30/2017	2240			
5/31/2017		1730	3970	4210
8/23/2017	2160	1550	4050	3990
5/22/2018	2380	1500		
5/23/2018				3740
5/24/2018			3680	
6/12/2018	2400	1550	3820	4080
10/17/2018	2220	1740	4730	4250
11/19/2018	2360	1990	4710	3920
4/10/2019	2630	1250	3680	3280
5/14/2019	2340	1480	3580	3130 (D)
10/8/2019	2330	1840	4720	
10/10/2019				4000
10/16/2019	3650 (o)	1830	4210	4060
4/6/2020	2240	1440	2630	2820
7/13/2020	2240	1540	3650	
7/14/2020				3310
2/22/2021	2230	1620	4670	3190
7/12/2021	2210	1390	3510	3000
1/25/2022	2150	1500	3950	3180
7/5/2022	2100	1250	4220	3240
2/20/2023	2280	1420	3230	
2/21/2023				3160

Time Series

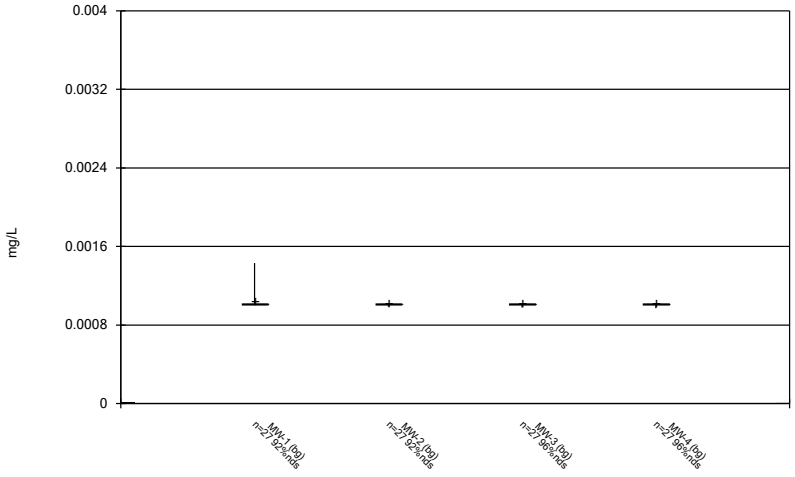
Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:27 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
4/25/2016	3660			
4/27/2016		3290	1640	2480
6/21/2016	3920	3250	2460	2360
10/12/2017	4000	3220	2460	2530
10/13/2017	3960	3250	2420	2740
10/14/2017	3910	3260	2320	2630
10/15/2017	3890	3260	1150	2530
10/16/2017	3980	3360	2320	2740
10/17/2017	3940	3420	2360	2650
11/16/2017	3930	3280	2460	2650
5/23/2018	3660	3340	2390	2750
11/20/2018	3780	3330	2090	2520
5/14/2019	3520			
5/15/2019		3130	2310	2540
10/8/2019			2340	
10/9/2019				2590
10/10/2019	3830	3260		
4/7/2020	3270			
4/8/2020		2940	2230	2450
7/14/2020	3710	3270	2210	
7/15/2020				2460
2/23/2021	3740	3230	2320	2550
7/20/2021		3090	2110	2420
7/21/2021	3570			
1/31/2022	3560	3050	2140	
2/1/2022				2420
7/6/2022	3390	3110	2110	2320
2/21/2023	3310		2220	2370
2/22/2023		2790		

FIGURE B.

Box & Whiskers Plot

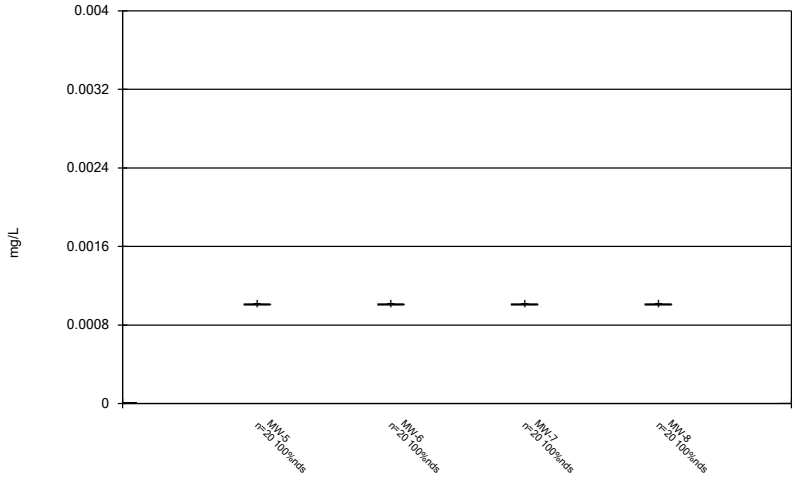


Constituent: Antimony Analysis Run 5/17/2023 2:29 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

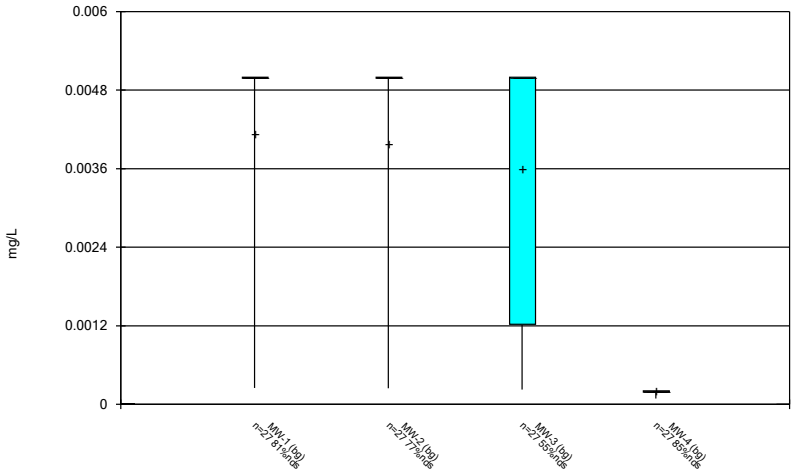


Constituent: Antimony Analysis Run 5/17/2023 2:29 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

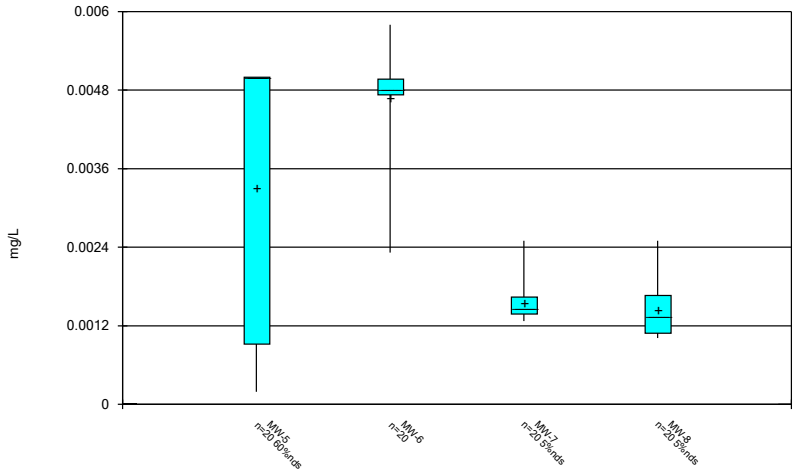


Constituent: Arsenic Analysis Run 5/17/2023 2:29 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

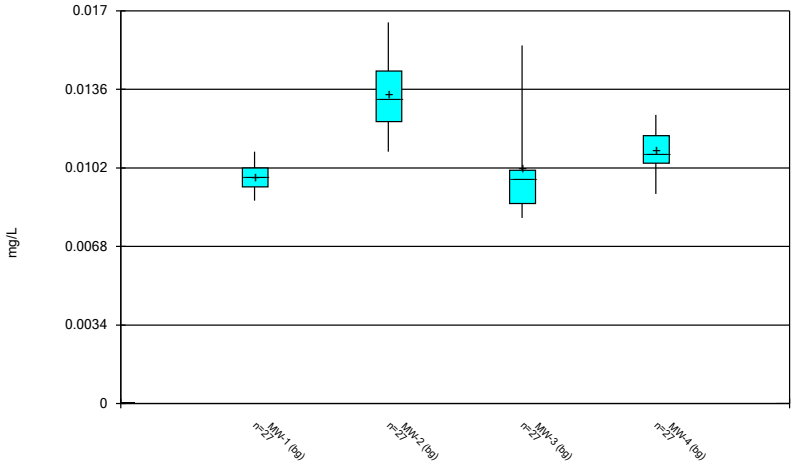
Box & Whiskers Plot



Constituent: Arsenic Analysis Run 5/17/2023 2:29 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

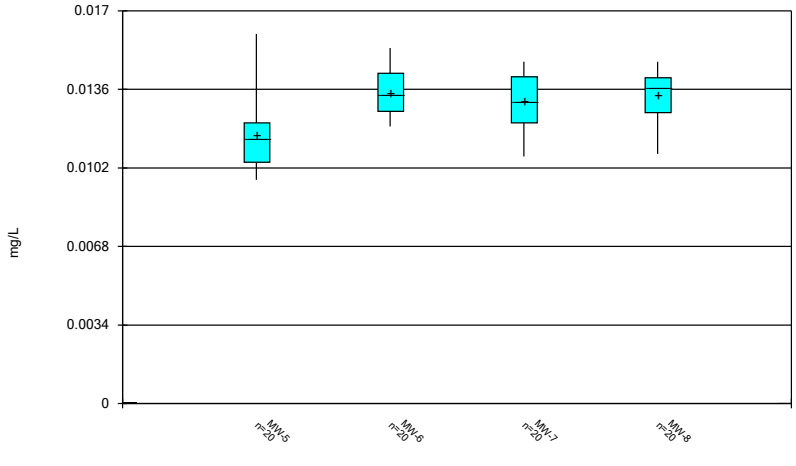


Constituent: Barium Analysis Run 5/17/2023 2:29 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

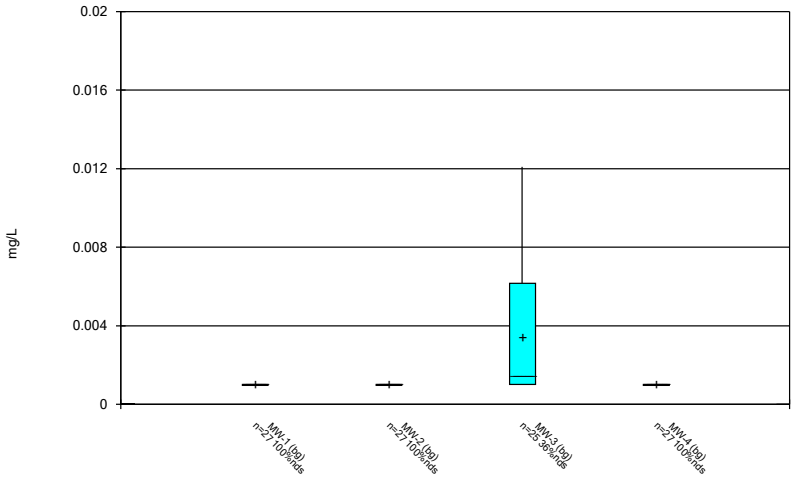


Constituent: Barium Analysis Run 5/17/2023 2:29 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

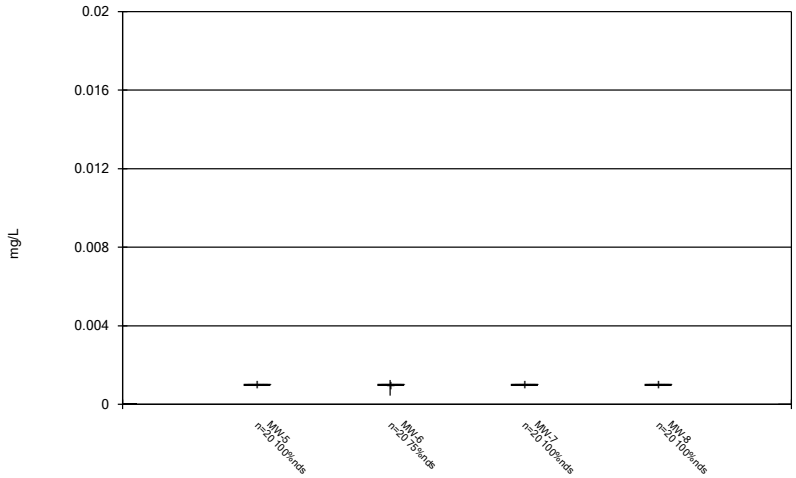


Constituent: Beryllium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

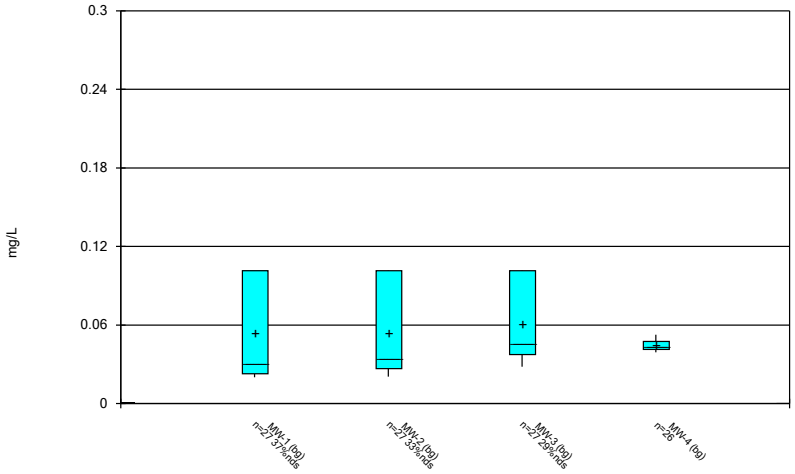
Box & Whiskers Plot



Constituent: Beryllium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

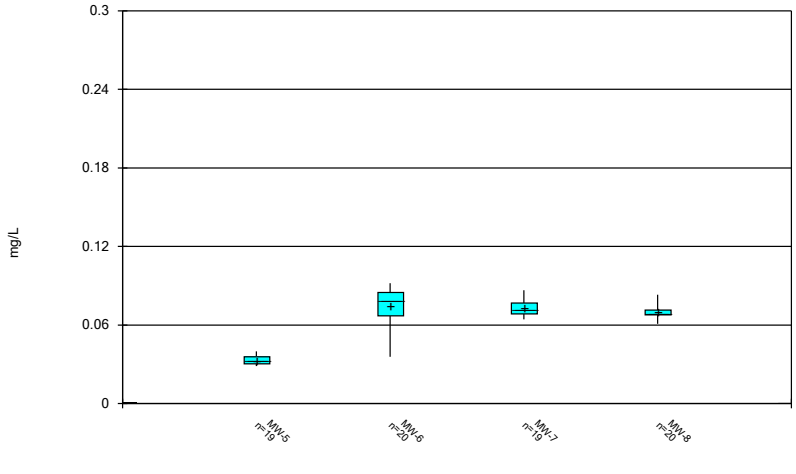


Constituent: Boron, total Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

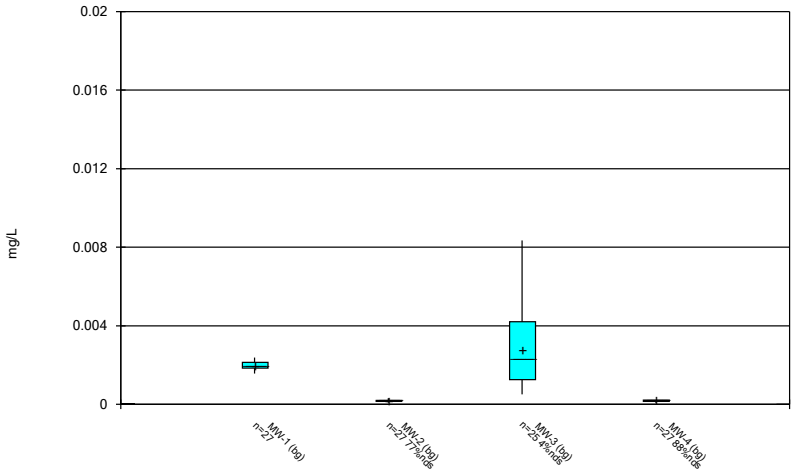


Constituent: Boron, total Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

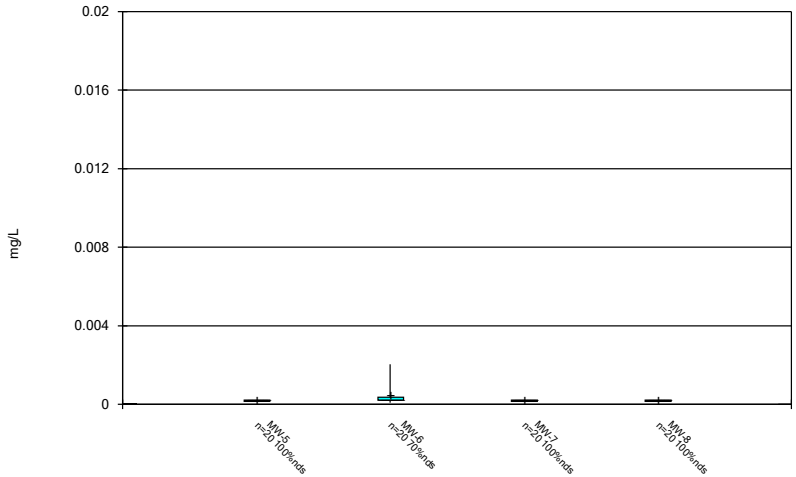


Constituent: Cadmium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

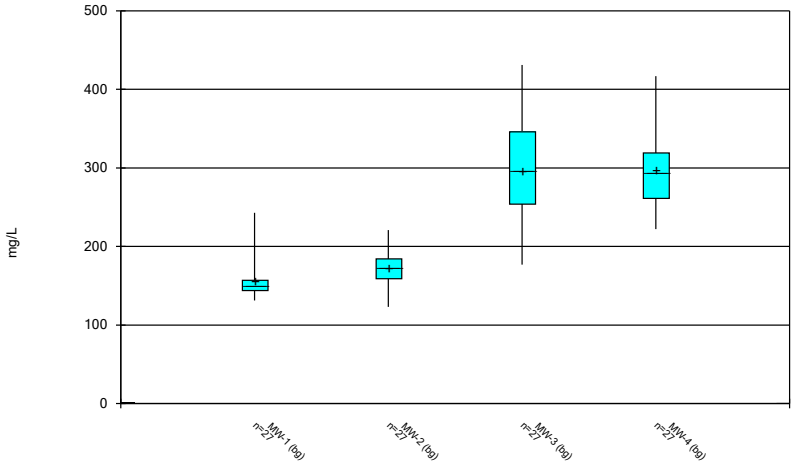
Box & Whiskers Plot



Constituent: Cadmium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

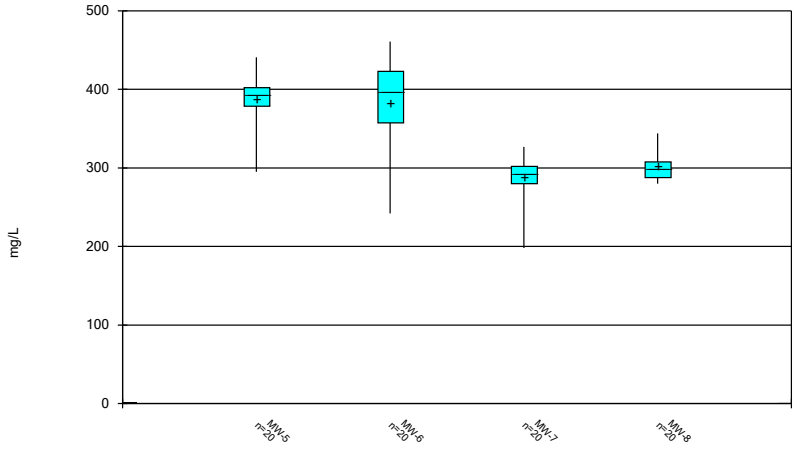
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

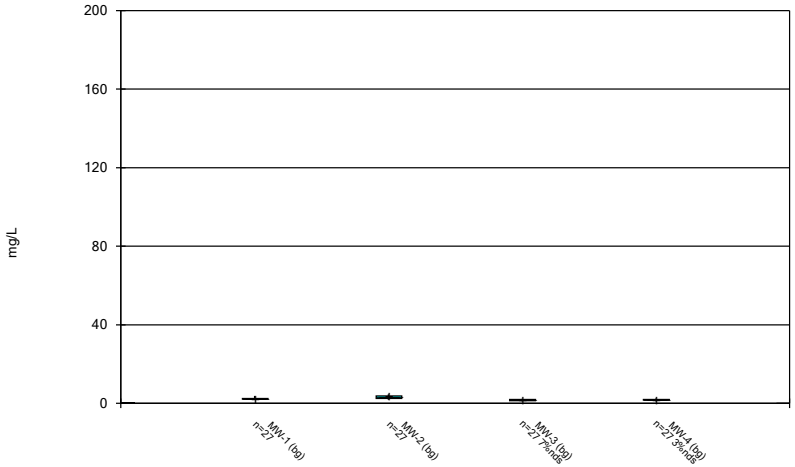
Box & Whiskers Plot



Constituent: Calcium, total Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

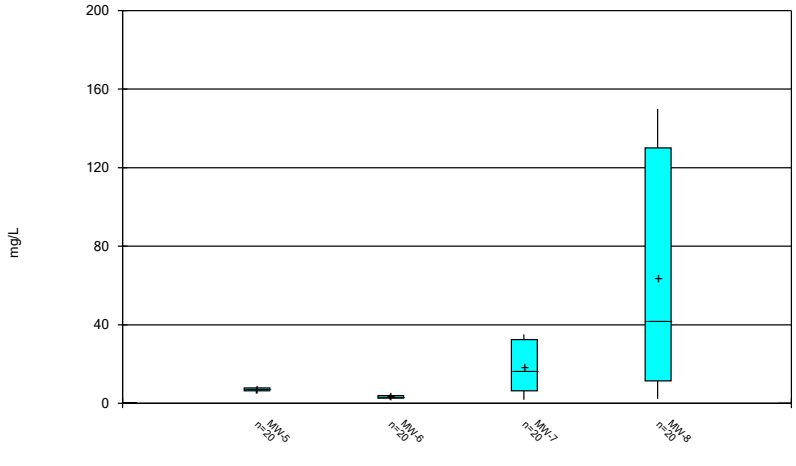
Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

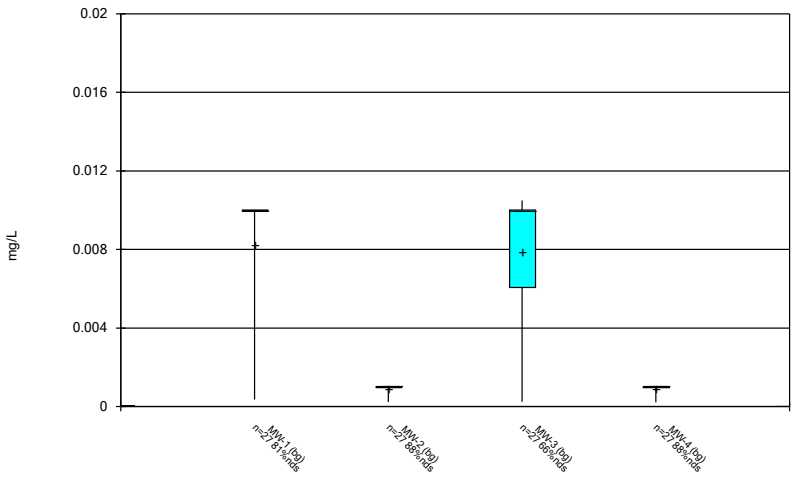
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Chloride, Total Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

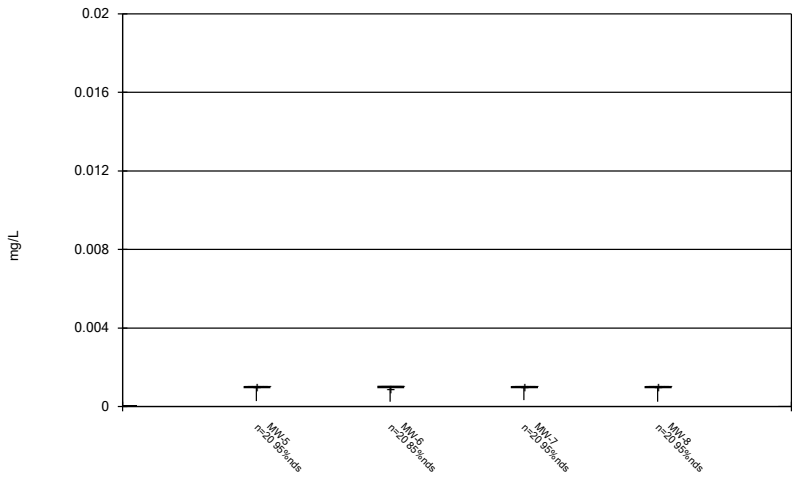


Constituent: Chromium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

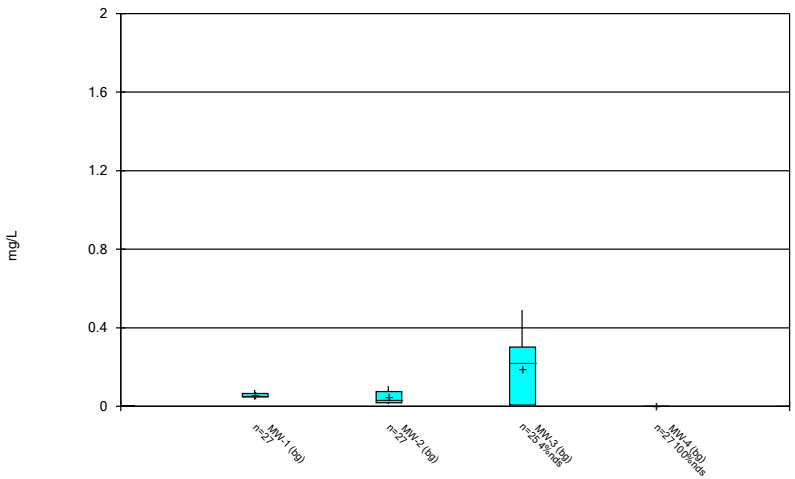


Constituent: Chromium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

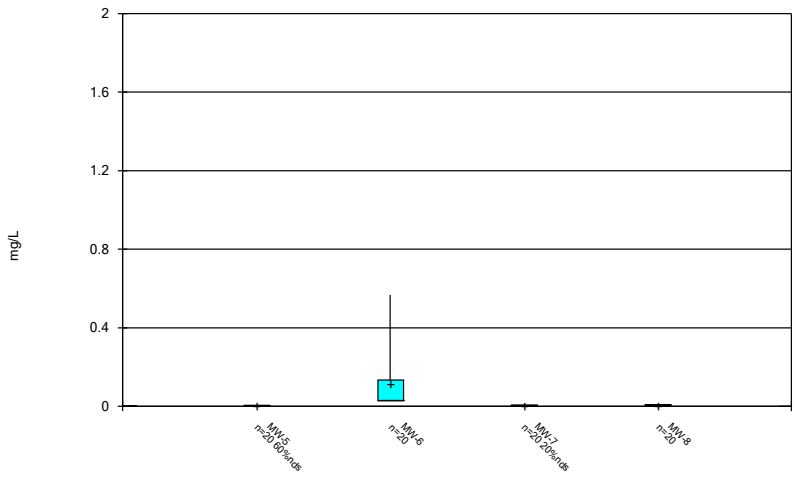


Constituent: Cobalt Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

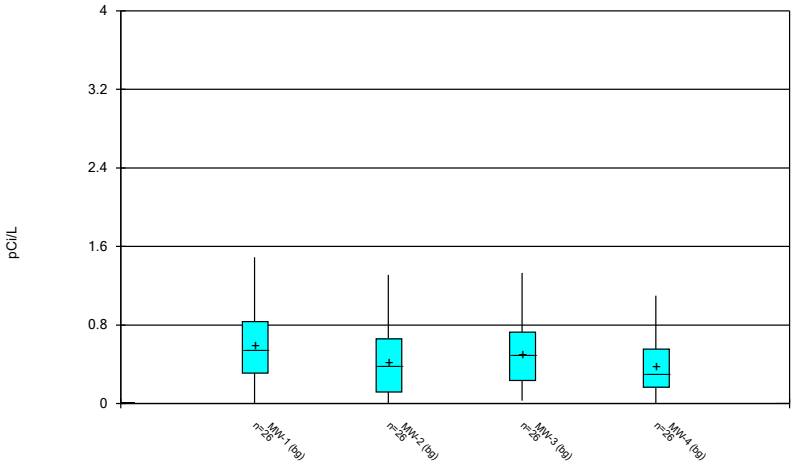
Box & Whiskers Plot



Constituent: Cobalt Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

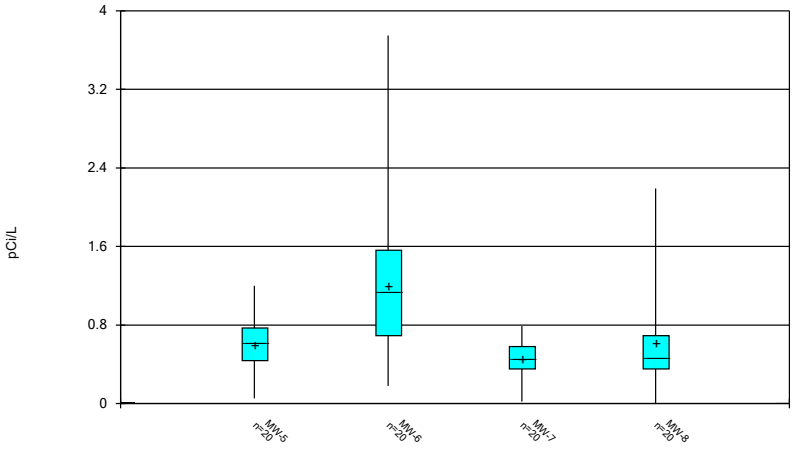
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

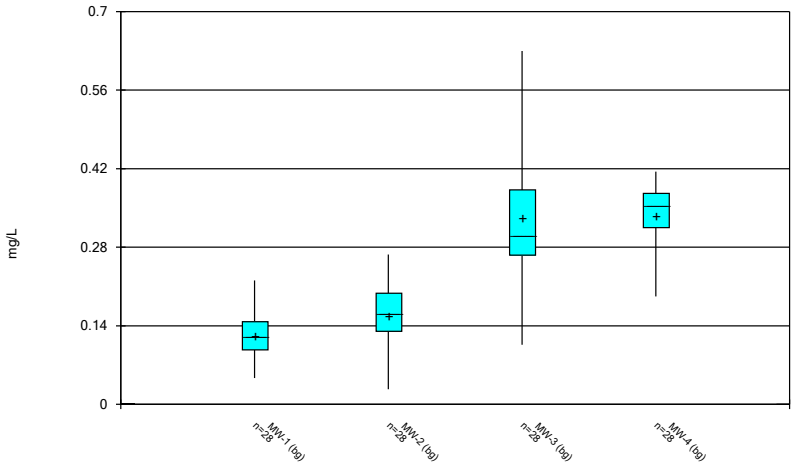
Box & Whiskers Plot



Constituent: Combined Radium 226 + 228 Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

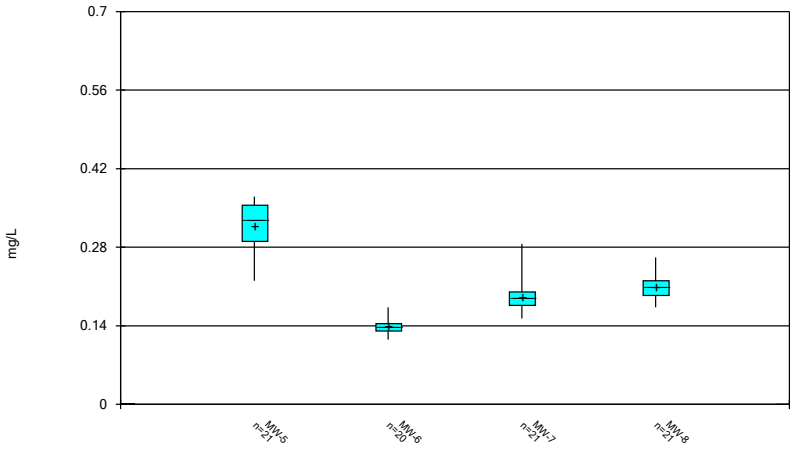
Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

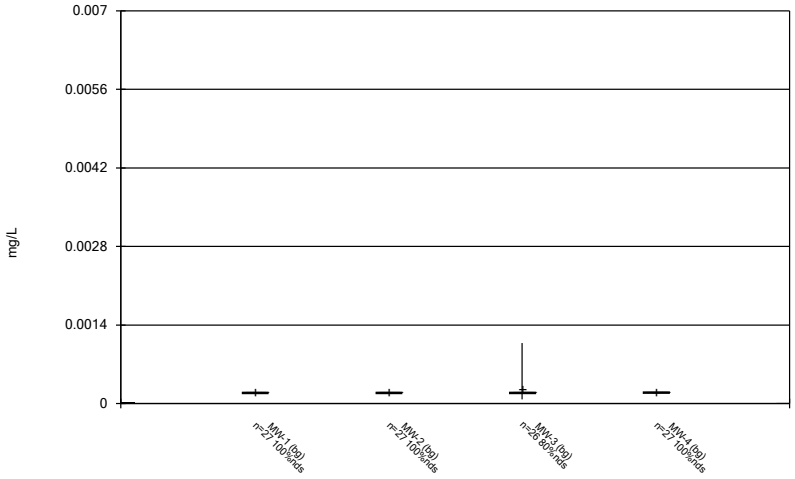
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Fluoride, total Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

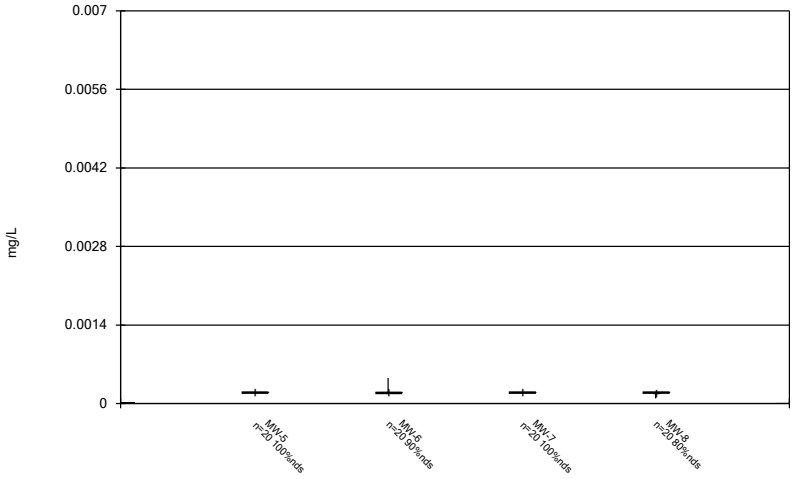


Constituent: Lead Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

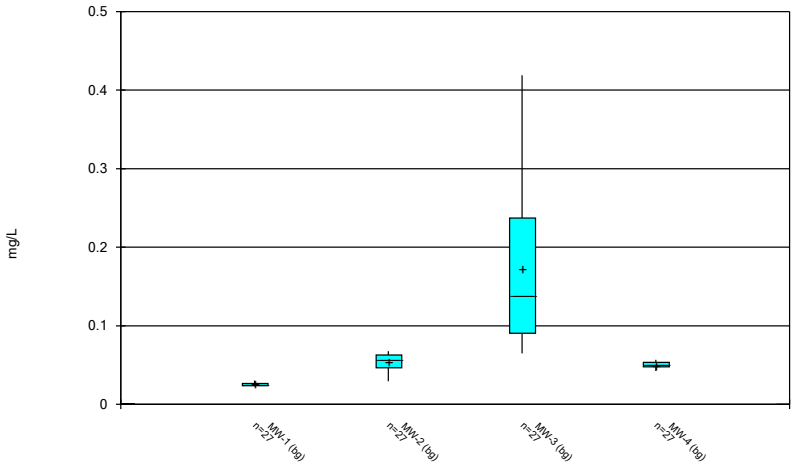


Constituent: Lead Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

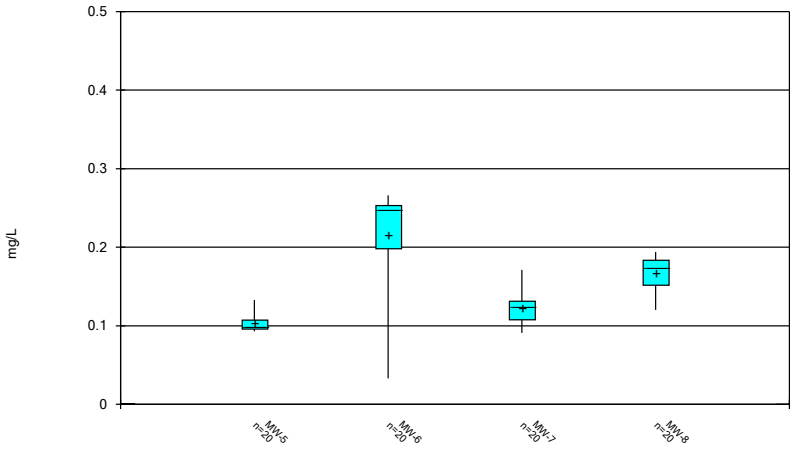


Constituent: Lithium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

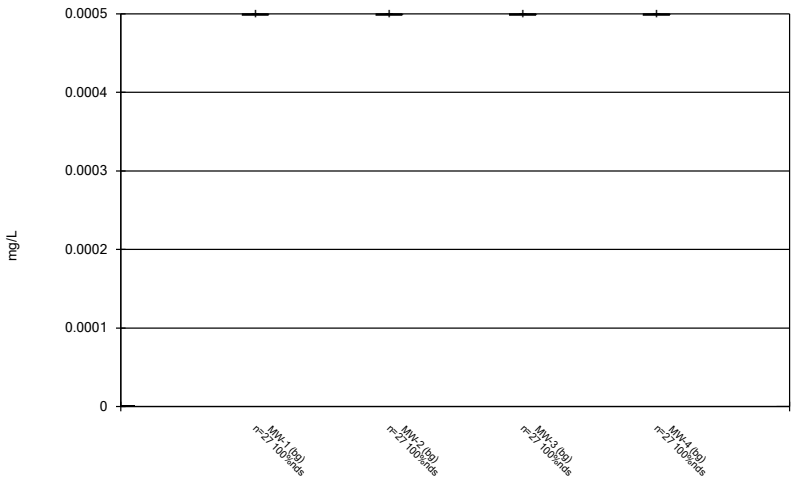
Box & Whiskers Plot



Constituent: Lithium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

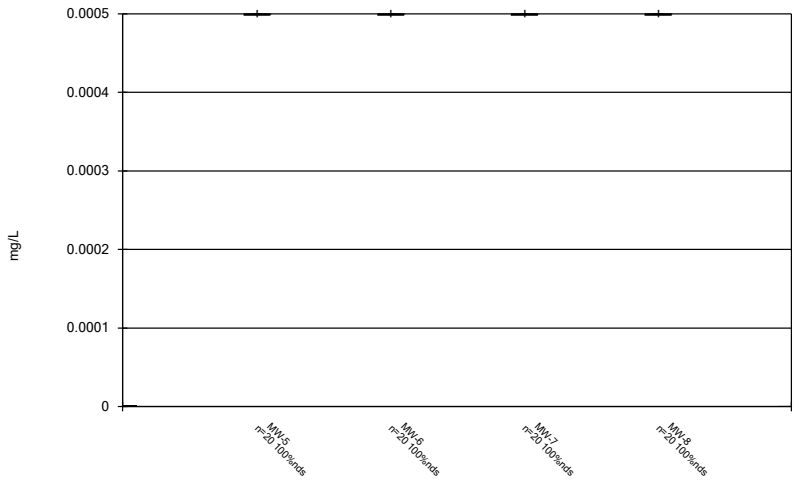


Constituent: Mercury Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

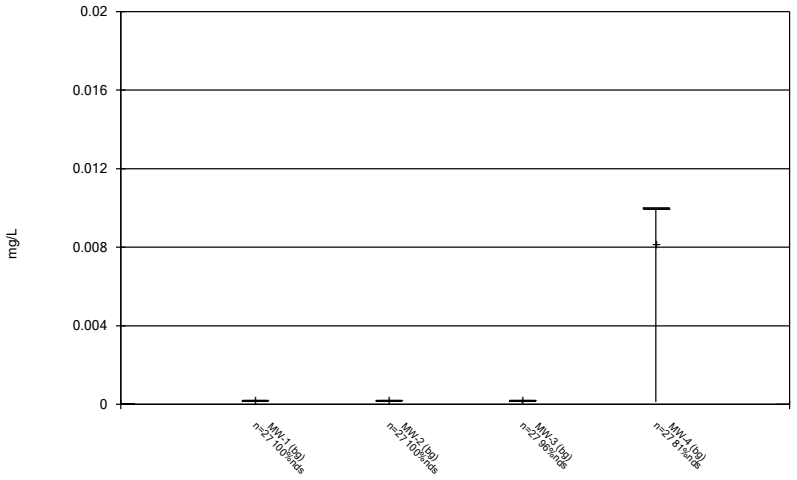


Constituent: Mercury Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

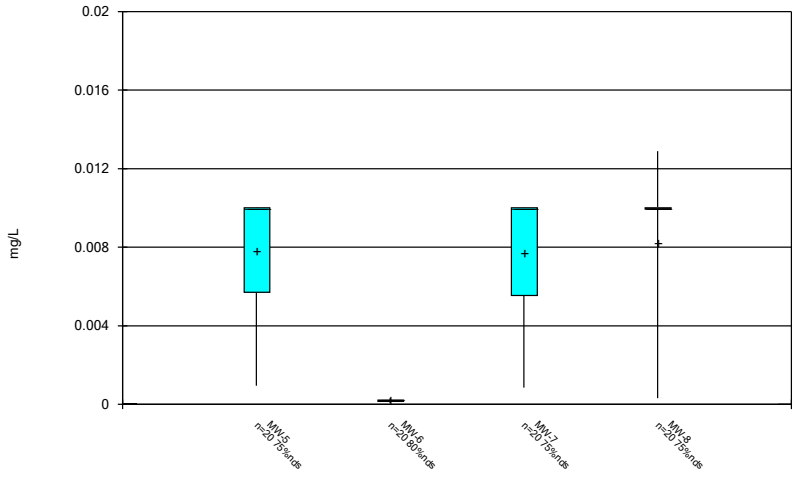


Constituent: Molybdenum Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

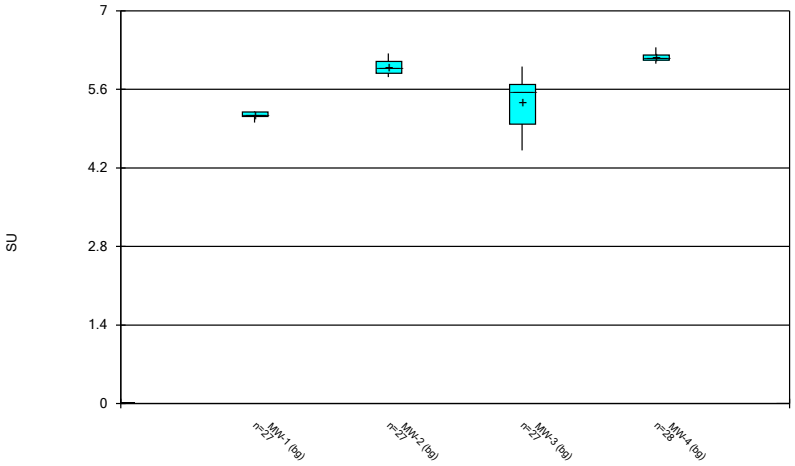
Box & Whiskers Plot



Constituent: Molybdenum Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

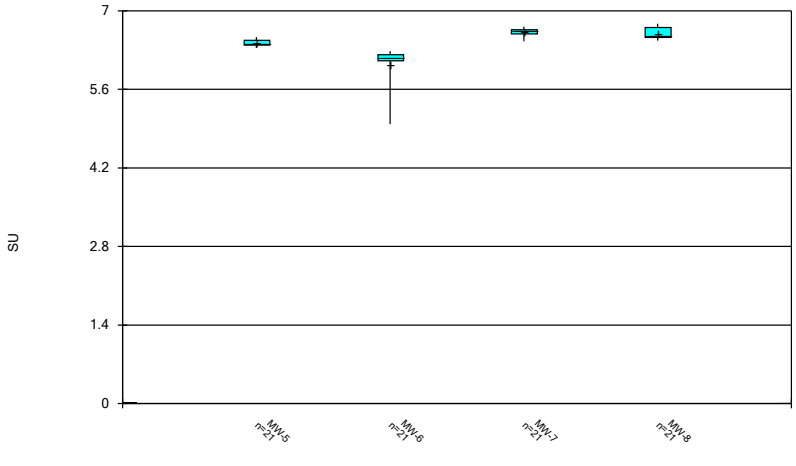


Constituent: pH, Field Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

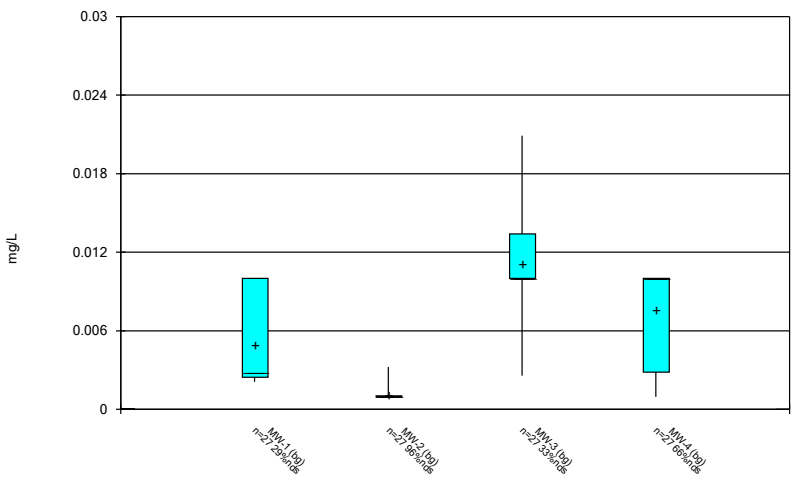


Constituent: pH, Field Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot

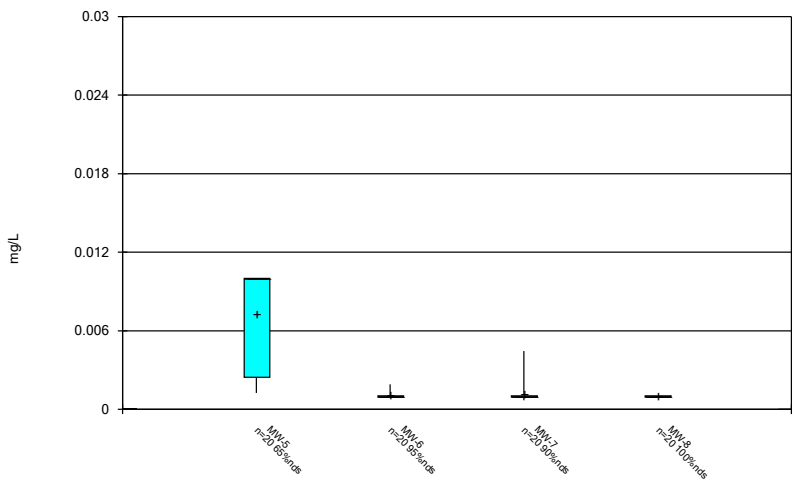


Constituent: Selenium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

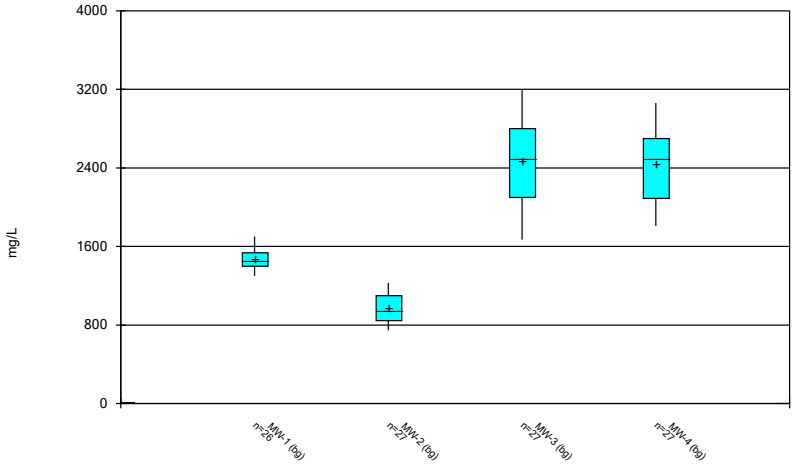
Box & Whiskers Plot



Constituent: Selenium Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

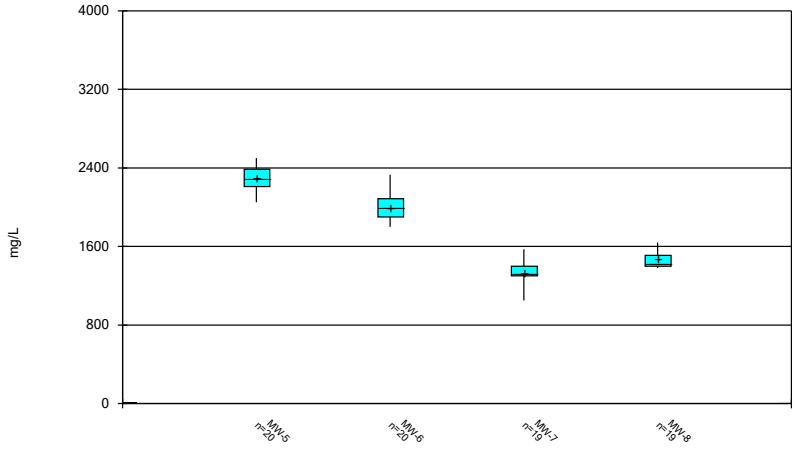
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

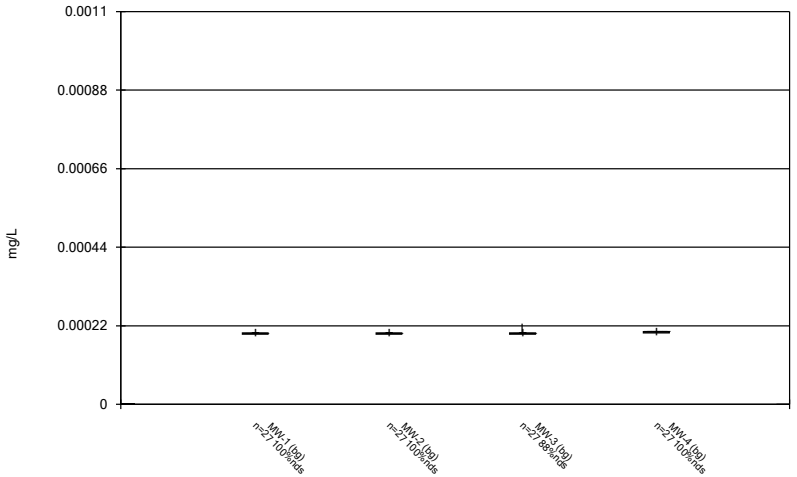
Box & Whiskers Plot



Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

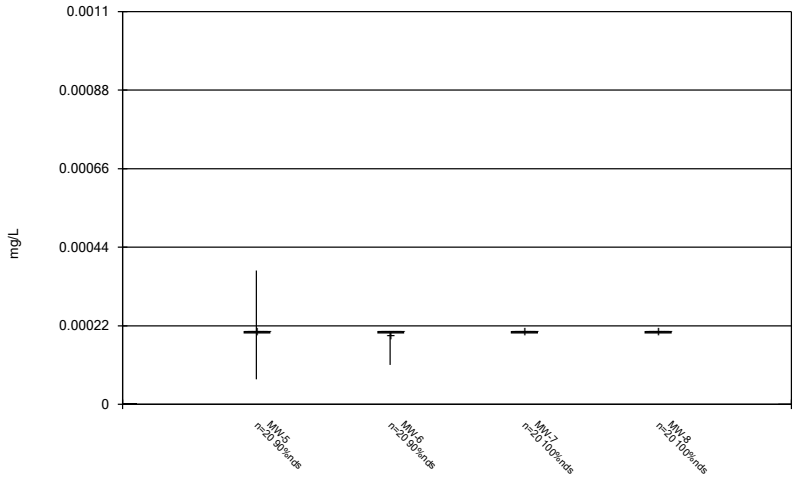
Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

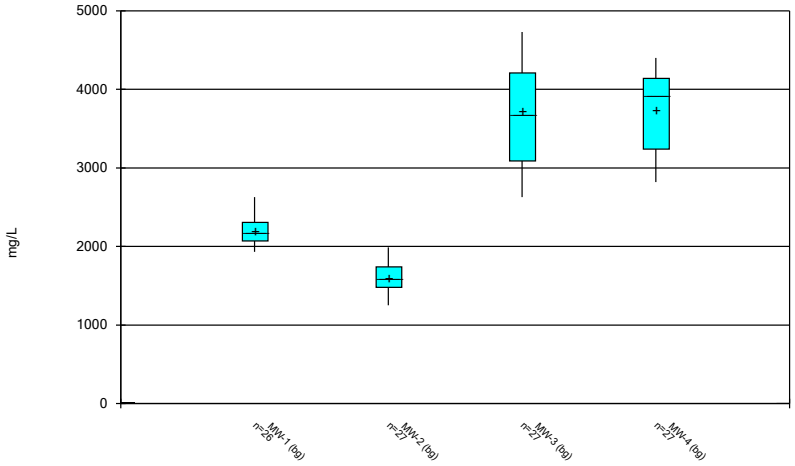
Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Thallium Analysis Run 5/17/2023 2:30 PM
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Box & Whiskers Plot

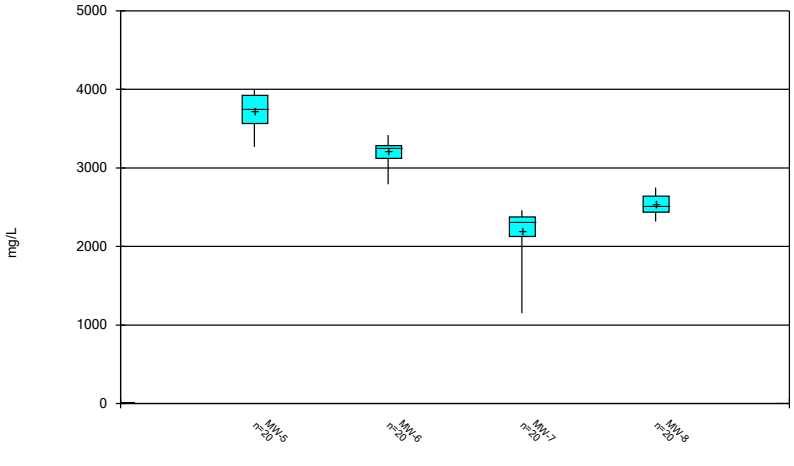


Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Box & Whiskers Plot



Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:30 PM

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

FIGURE C.

Outlier Summary

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:31 PM

	MW-3 Beryllium (mg/L)	MW-4 Boron, total (mg/L)	MW-5 Boron, total (mg/L)	MW-7 Boron, total (mg/L)	MW-3 Cadmium (mg/L)	MW-3 Cobalt (mg/L)	MW-6 Fluoride, total (mg/L)	MW-3 Lead (mg/L)	MW-3 pH, Field (SU)	MW-1 Sulfate as SO4 (mg/L)
4/25/2016					0.0121 (O)					
4/27/2016				0.253 (O)						
1/18/2017	0.0169 (O)									
5/22/2018										2100 (o)
5/23/2018										
11/19/2018	0.0185 (O)							0.00692 (o)	3.77 (o)	
5/14/2019		<0.203 (o)	<0.203 (o)							
10/8/2019						1.07 (o)				
10/16/2019						0.848 (o)				
4/8/2020							<0.1 (o)			
7/13/2020					0.00885 (O)					

	MW-7 Sulfate as SO4 (mg/L)	MW-8 Sulfate as SO4 (mg/L)	MW-1 Total Dissolved Solids [TDS] (mg/L)
4/25/2016			
4/27/2016			
1/18/2017			
5/22/2018			
5/23/2018	1900 (O)	2100 (o)	
11/19/2018			
5/14/2019			
10/8/2019			
10/16/2019			3650 (o)
4/8/2020			
7/13/2020			

FIGURE D.

Appendix III Intrawell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:40 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Fluoride, total (mg/L)	**MW-1**	**0.1878**	**n/a**	**2/20/2023**	**0.221**	**Yes**	**24**	**0.1172**	**0.03644**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-2**	**0.2528**	**n/a**	**2/20/2023**	**0.267**	**Yes**	**24**	**0.1456**	**0.05538**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-6**	**0.1576**	**n/a**	**2/22/2023**	**0.173**	**Yes**	**16**	**0.1372**	**0.009847**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-7**	**0.2144**	**n/a**	**2/21/2023**	**0.216**	**Yes**	**17**	**0.1848**	**0.01443**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**

Appendix III Intrawell Prediction Limits - All Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:40 PM

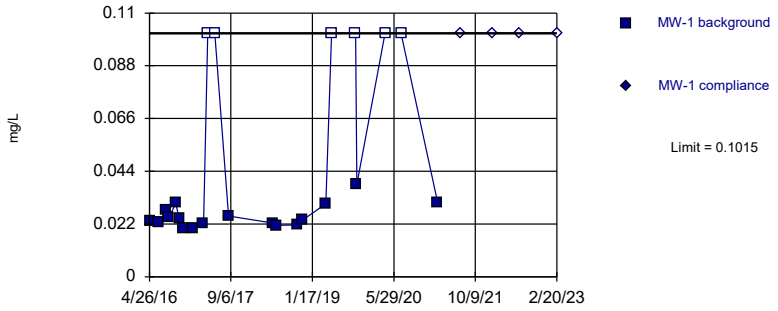
Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron, total (mg/L)	MW-1	0.1015	n/a	2/20/2023	0.1015ND	No	23	n/a	n/a	26.09	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Boron, total (mg/L)	MW-2	0.1015	n/a	2/20/2023	0.1015ND	No	23	n/a	n/a	21.74	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Boron, total (mg/L)	MW-3	0.1015	n/a	2/20/2023	0.1015ND	No	23	n/a	n/a	21.74	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Boron, total (mg/L)	MW-4	0.05253	n/a	2/21/2023	0.0408J	No	22	0.04512	0.003776	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-5	0.04034	n/a	2/21/2023	0.0315J	No	15	0.03281	0.003562	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-6	0.1015	n/a	2/22/2023	0.0356J	No	16	0.07909	0.01082	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-7	0.0854	n/a	2/21/2023	0.0645J	No	15	0.07347	0.005639	0	None	No	0.00188	Param Intra 1 of 2
Boron, total (mg/L)	MW-8	0.0831	n/a	2/21/2023	0.0609J	No	16	n/a	n/a	0	n/a	n/a	0.006456	NP Intra (normality) 1 of 2
Calcium, total (mg/L)	MW-1	243	n/a	2/20/2023	151	No	23	n/a	n/a	0	n/a	n/a	0.003415	NP Intra (normality) 1 of 2
Calcium, total (mg/L)	MW-2	214.8	n/a	2/20/2023	160	No	23	174.2	20.8	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-3	416	n/a	2/20/2023	210	No	23	300	59.54	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-4	386.1	n/a	2/21/2023	232	No	23	304.8	41.68	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-5	459.6	n/a	2/21/2023	367	No	16	387	34.95	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-6	500.3	n/a	2/22/2023	250	No	16	388.9	53.66	0	None	No	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-7	343.5	n/a	2/21/2023	286	No	16	85434	15683	0	None	x^2	0.00188	Param Intra 1 of 2
Calcium, total (mg/L)	MW-8	340	n/a	2/21/2023	327	No	16	303.1	17.76	0	None	No	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	**MW-1**	**0.1878**	**n/a**	**2/20/2023**	**0.221**	**Yes**	**24**	**0.1172**	**0.03644**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-2**	**0.2528**	**n/a**	**2/20/2023**	**0.267**	**Yes**	**24**	**0.1456**	**0.05538**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	MW-3	0.5886	n/a	2/20/2023	0.379	No	24	0.3299	0.1336	0	None	No	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	MW-4	0.4215	n/a	2/21/2023	0.415	No	24	0.1114	0.03425	0	None	x^2	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	MW-5	0.42	n/a	2/21/2023	0.319	No	17	0.3204	0.0485	0	None	No	0.00188	Param Intra 1 of 2
Fluoride, total (mg/L)	**MW-6**	**0.1576**	**n/a**	**2/22/2023**	**0.173**	**Yes**	**16**	**0.1372**	**0.009847**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	**MW-7**	**0.2144**	**n/a**	**2/21/2023**	**0.216**	**Yes**	**17**	**0.1848**	**0.01443**	**0**	**None**	**No**	**0.00188**	**Param Intra 1 of 2**
Fluoride, total (mg/L)	MW-8	0.2341	n/a	2/21/2023	0.212	No	17	0.21	0.01171	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-1	1665	n/a	2/20/2023	1520	No	22	1461	104.1	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-2	1274	n/a	2/20/2023	767	No	23	997.8	141.7	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-3	3272	n/a	2/20/2023	2110	No	23	2451	421.1	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-4	3143	n/a	2/21/2023	1930	No	23	2511	324	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-5	2582	n/a	2/21/2023	2210	No	16	2304	133.9	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-6	2274	n/a	2/22/2023	1870	No	16	2001	131.7	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-7	1604	n/a	2/21/2023	1450	No	15	1324	132.3	0	None	No	0.00188	Param Intra 1 of 2
Sulfate as SO4 (mg/L)	MW-8	1640	n/a	2/21/2023	1510	No	15	n/a	n/a	0	n/a	n/a	0.007533	NP Intra (normality) 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-1	2519	n/a	2/20/2023	2280	No	22	2197	164	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-2	2021	n/a	2/20/2023	1420	No	23	1643	193.7	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-3	5051	n/a	2/20/2023	3230	No	23	3729	678.1	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-4	4600	n/a	2/21/2023	3160	No	23	1.5e7	3201096	0	None	x^2	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-5	4202	n/a	2/21/2023	3310	No	16	3794	196.6	0	None	No	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-6	3466	n/a	2/22/2023	2790	No	16	1.1e7	676605	0	None	x^2	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-7	2590	n/a	2/21/2023	2220	No	16	6.3e16	2.6e16	0	None	x^5	0.00188	Param Intra 1 of 2
Total Dissolved Solids [TDS] (mg/L)	MW-8	2808	n/a	2/21/2023	2370	No	16	2573	113.3	0	None	No	0.00188	Param Intra 1 of 2

Sanitas™ v.9.6.37 Groundwater Stats Consulting. 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 23 background values. 26.09% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

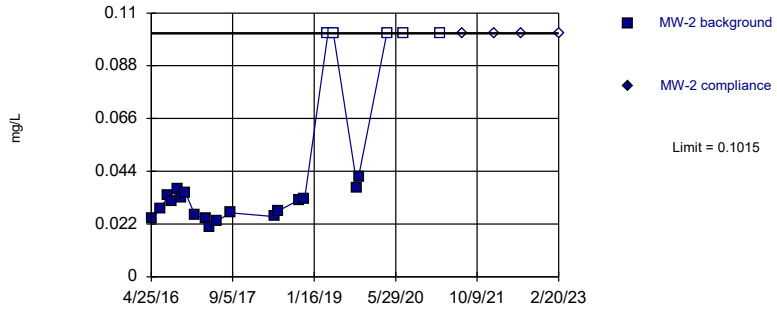
Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. 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 23 background values. 21.74% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

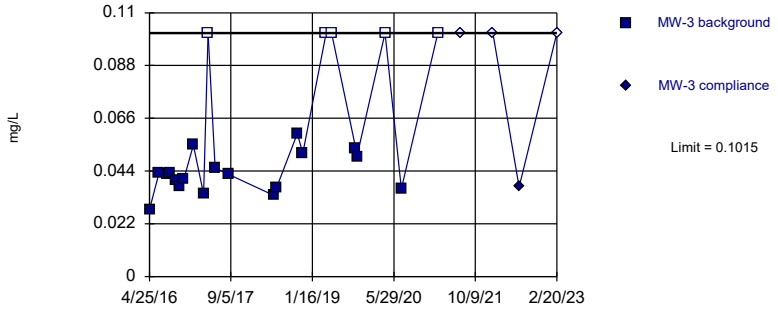
Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. 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 23 background values. 21.74% NDs. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

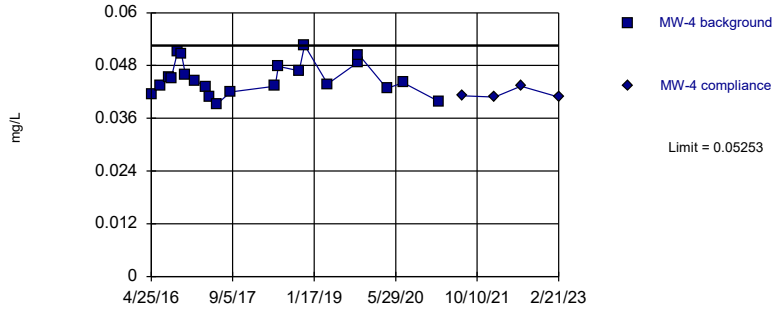
Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



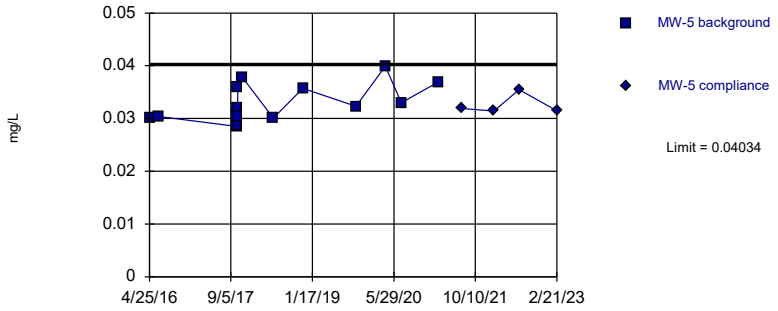
Background Data Summary: Mean=0.04512, Std. Dev.=0.003776, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9555, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.03281, Std. Dev.=0.003562, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9042, critical = 0.835. Kappa = 2.115 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

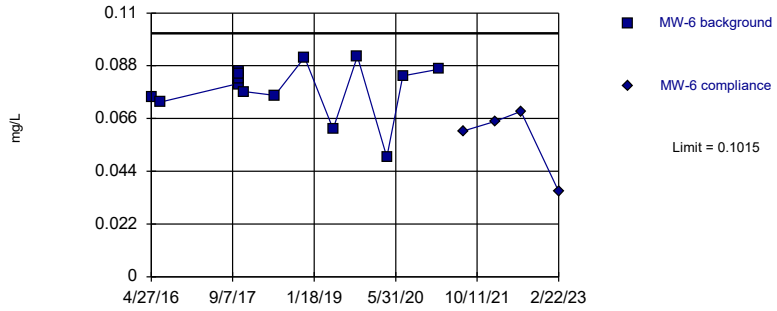
Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.07909, Std. Dev.=0.01082, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8662, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

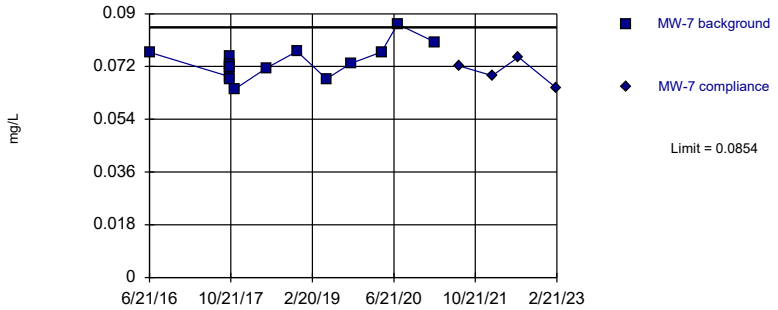
Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=0.07347, Std. Dev.=0.005639, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9629, critical = 0.835. Kappa = 2.115 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

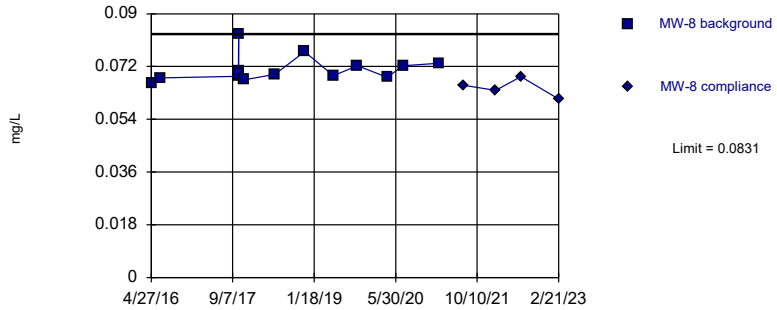
Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Non-parametric



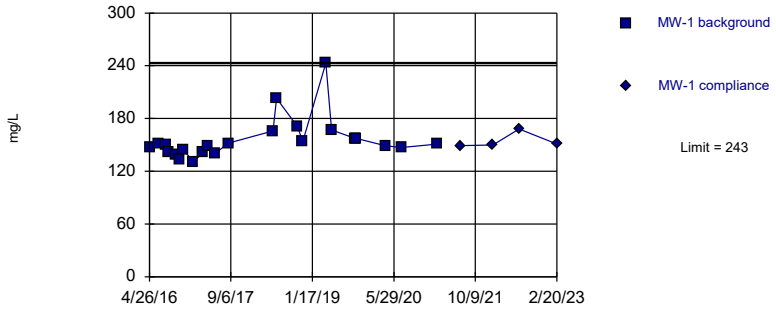
Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 16 background values. Well-constituent pair annual alpha = 0.01287. Individual comparison alpha = 0.006456 (1 of 2).

Constituent: Boron, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

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 23 background values. Well-constituent pair annual alpha = 0.006819. Individual comparison alpha = 0.003415 (1 of 2).

Constituent: Calcium, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

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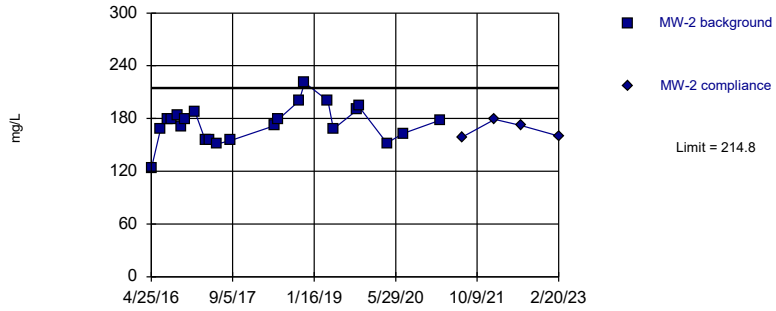
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=174.2, Std. Dev.=20.8, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9781, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

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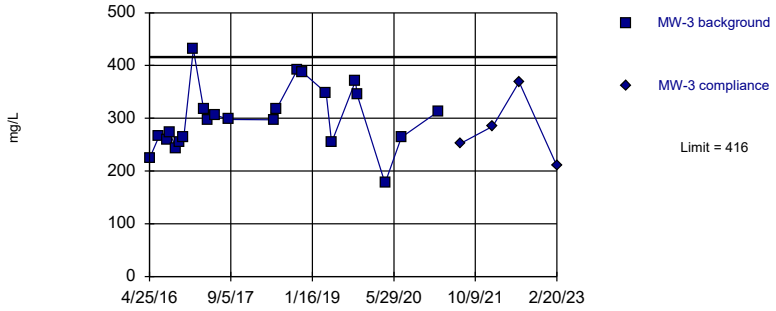
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=300, Std. Dev.=59.54, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9749, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

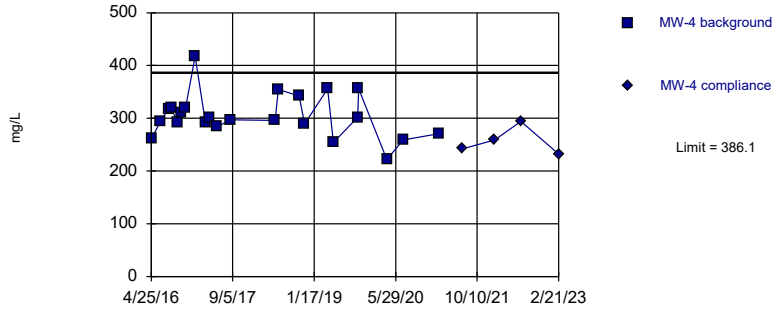
Constituent: Calcium, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



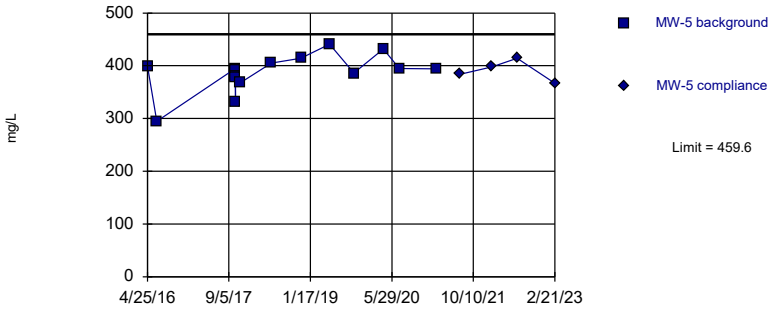
Background Data Summary: Mean=304.8, Std. Dev.=41.68, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9567, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=387, Std. Dev.=34.95, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8909, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

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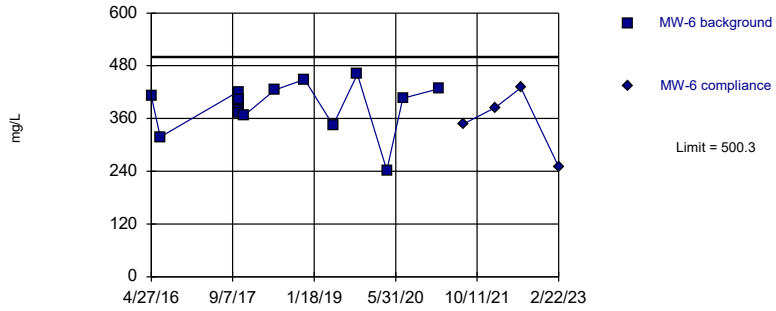
Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=388.9, Std. Dev.=53.66, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8977, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

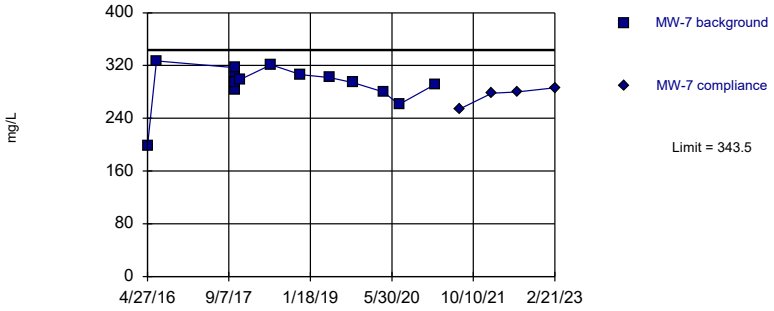
Constituent: Calcium, total Analysis Run 5/17/2023 2:38 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=85434, Std. Dev.=15683, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8569, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

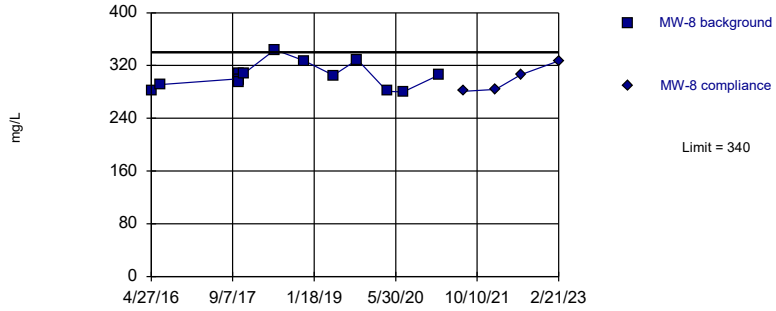
Constituent: Calcium, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



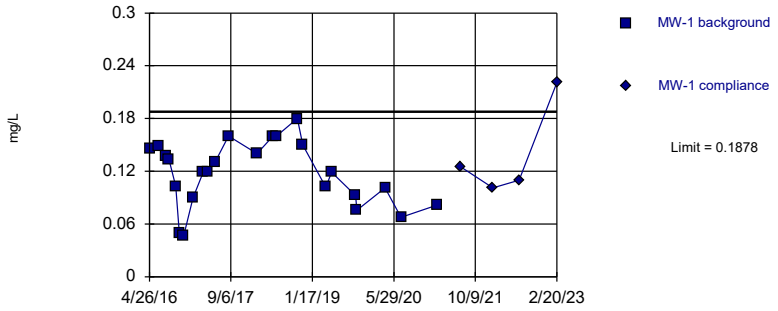
Background Data Summary: Mean=303.1, Std. Dev.=17.76, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9165, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Exceeds Limit

Prediction Limit

Intrawell Parametric



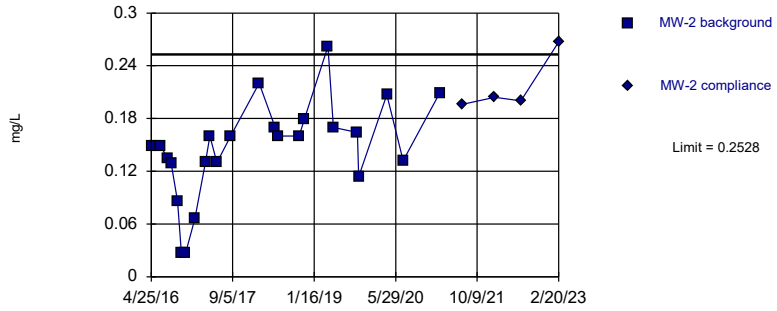
Background Data Summary: Mean=0.1172, Std. Dev.=0.03644, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9658, critical = 0.884. Kappa = 1.937 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Exceeds Limit

Prediction Limit

Intrawell Parametric



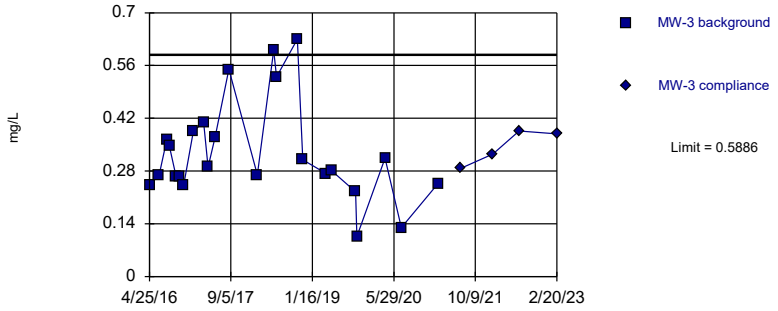
Background Data Summary: Mean=0.1456, Std. Dev.=0.05538, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9466, critical = 0.884. Kappa = 1.937 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



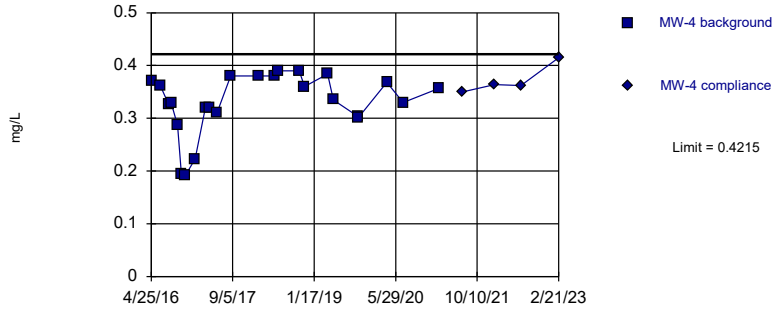
Background Data Summary: Mean=0.3299, Std. Dev.=0.1336, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9032, critical = 0.884. Kappa = 1.937 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



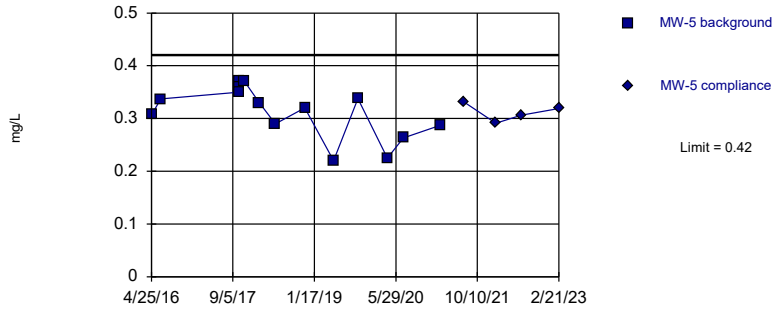
Background Data Summary (based on square transformation): Mean=0.1114, Std. Dev.=0.03425, n=24. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.897, critical = 0.884. Kappa = 1.937 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



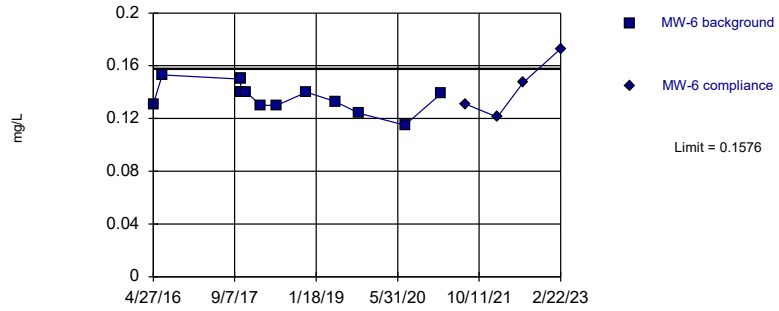
Background Data Summary: Mean=0.3204, Std. Dev.=0.0485, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8758, critical = 0.851. Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Exceeds Limit

Prediction Limit

Intrawell Parametric



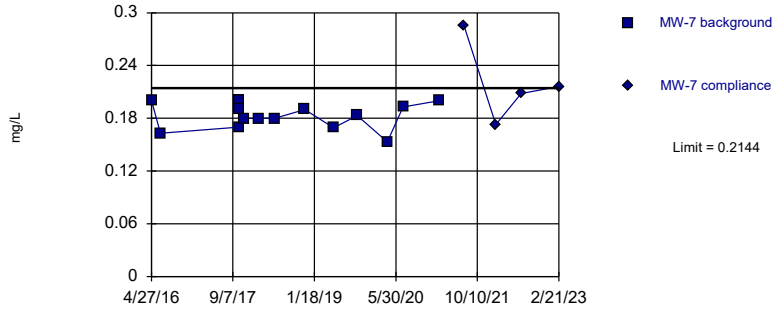
Background Data Summary: Mean=0.1372, Std. Dev.=0.009847, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9318, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Exceeds Limit

Prediction Limit

Intrawell Parametric



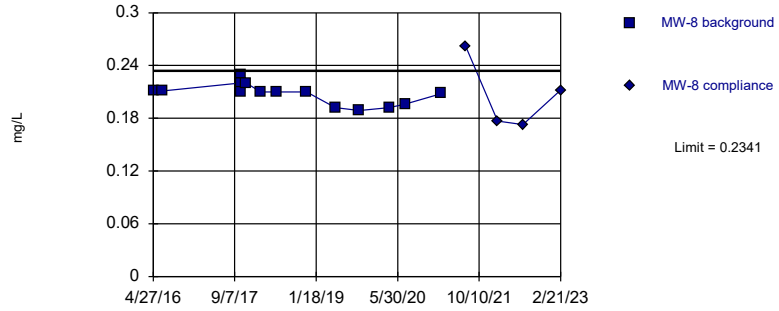
Background Data Summary: Mean=0.1848, Std. Dev.=0.01443, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9003, critical = 0.851. Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



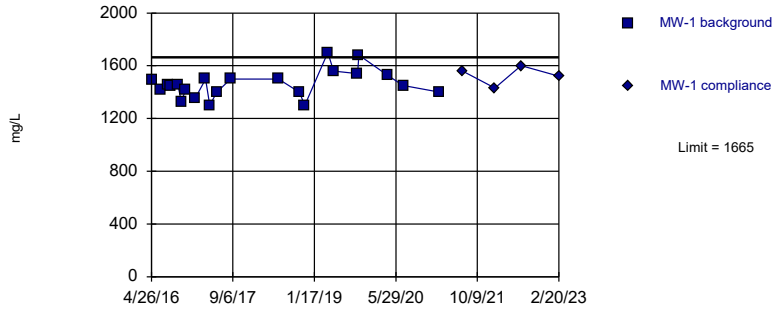
Background Data Summary: Mean=0.21, Std. Dev.=0.01171, n=17. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.904, critical = 0.851. Kappa = 2.054 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Fluoride, total Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1461, Std. Dev.=104.1, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9462, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

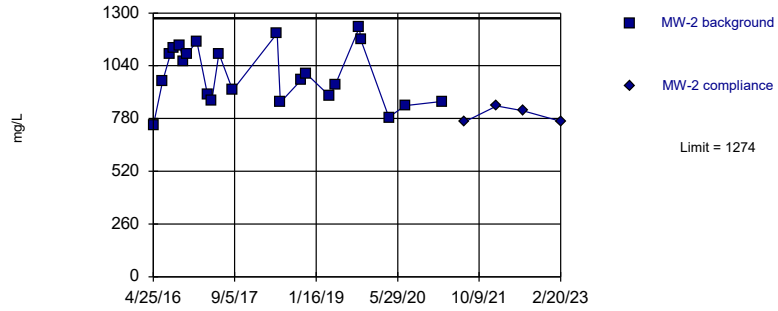
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=997.8, Std. Dev.=141.7, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9515, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

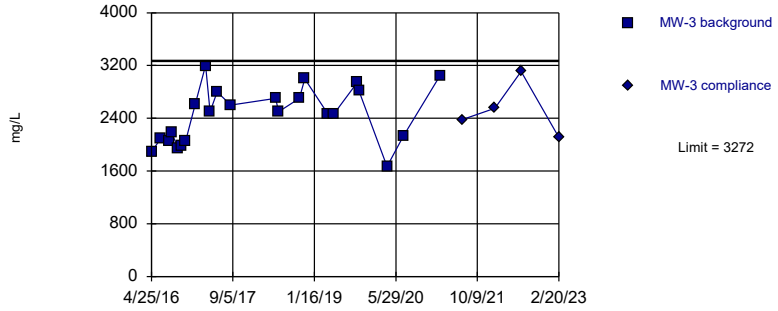
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2451, Std. Dev.=421.1, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9657, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

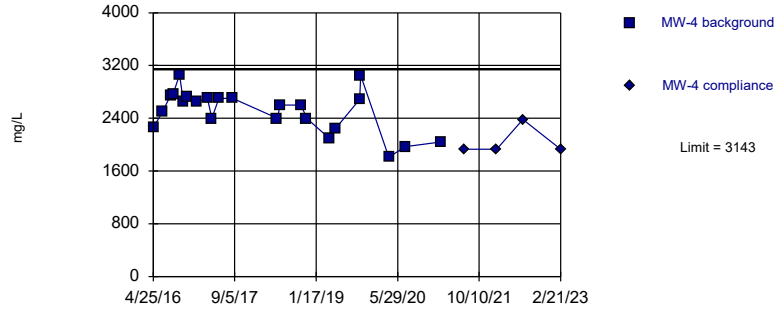
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2511, Std. Dev.=324, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9443, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

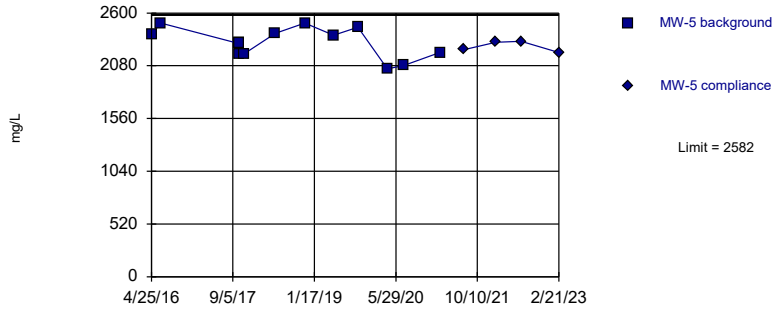
Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2304, Std. Dev.=133.9, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9454, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

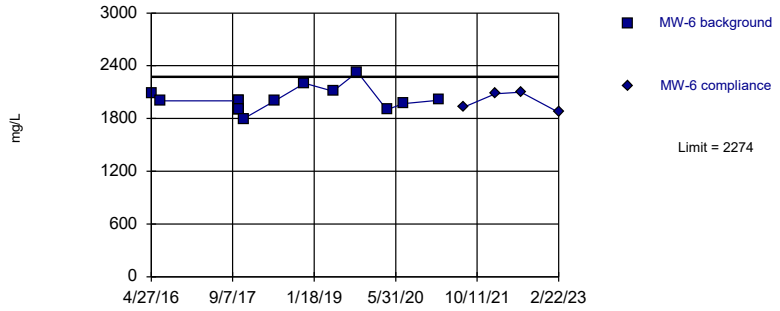
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2001, Std. Dev.=131.7, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9014, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

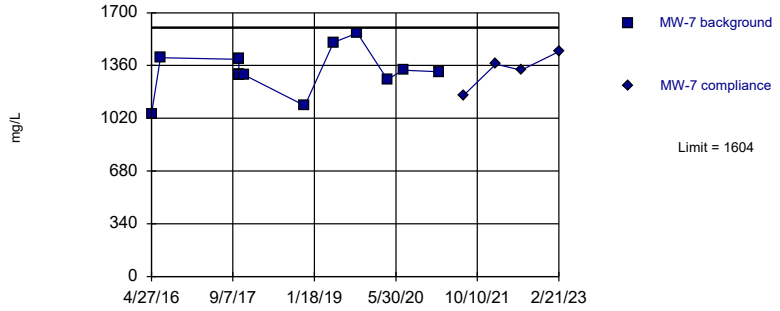
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1324, Std. Dev.=132.3, n=15. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9168, critical = 0.835. Kappa = 2.115 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

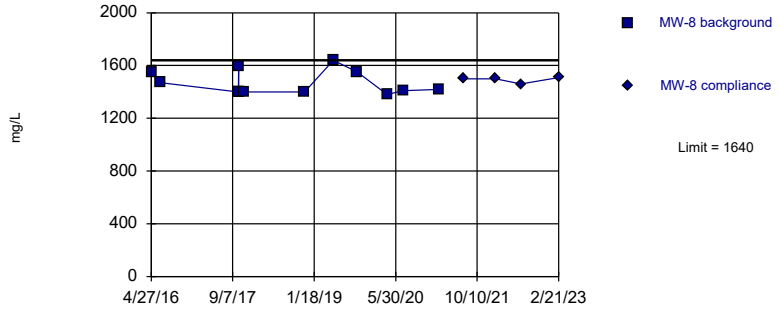
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

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 15 background values. Well-constituent pair annual alpha = 0.01501. Individual comparison alpha = 0.007533 (1 of 2).

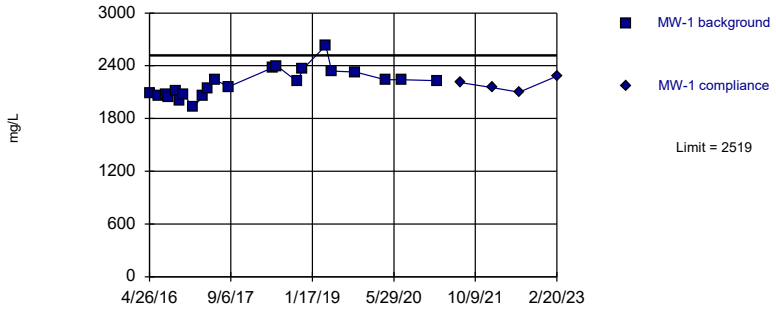
Constituent: Sulfate as SO4 Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2197, Std. Dev.=164, n=22. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9479, critical = 0.878. Kappa = 1.962 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

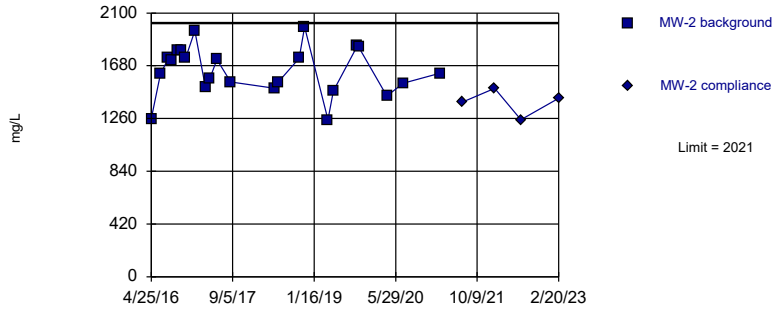
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=1643, Std. Dev.=193.7, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9661, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

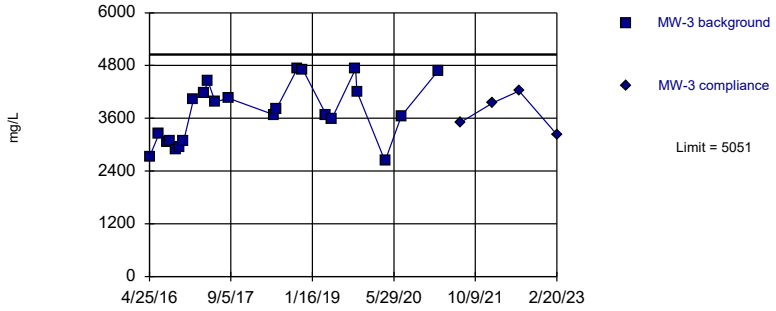
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3729, Std. Dev.=678.1, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9398, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

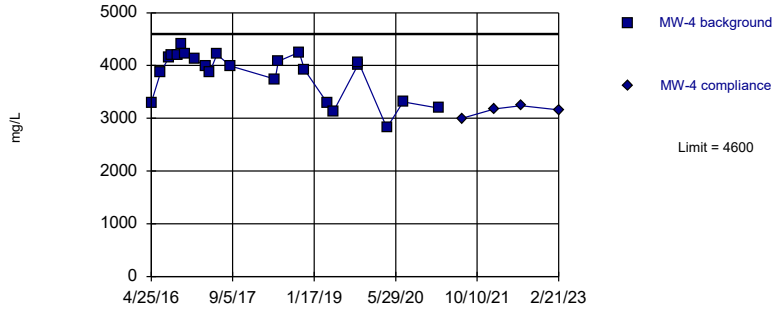
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=1.5e7, Std. Dev.=3201096, n=23. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8861, critical = 0.881. Kappa = 1.95 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

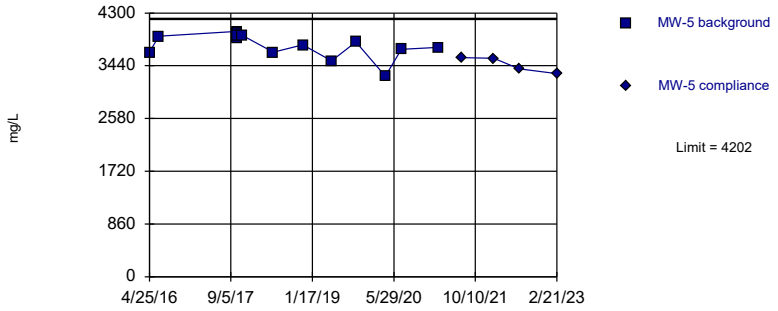
Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=3794, Std. Dev.=196.6, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8671, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

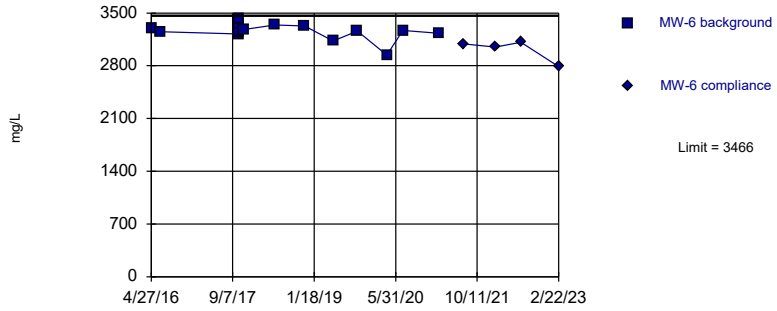
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on square transformation): Mean=1.1e7, Std. Dev.=676605, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.854, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

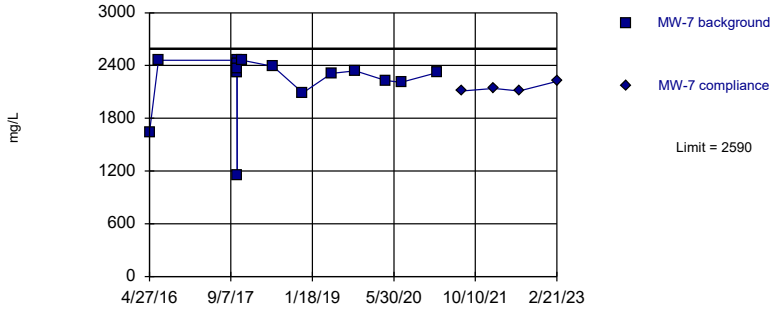
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary (based on x^5 transformation): Mean=6.3e16, Std. Dev.=2.6e16, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8587, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

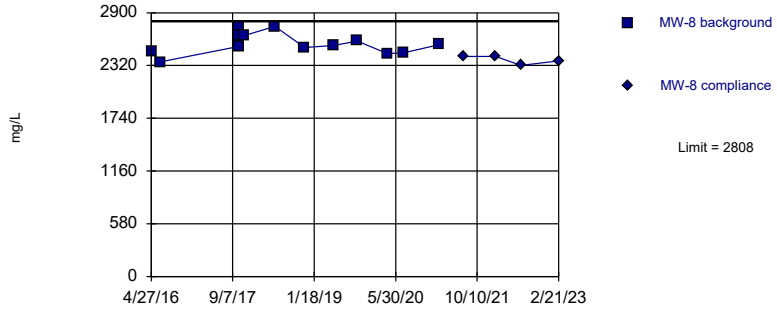
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Within Limit

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=2573, Std. Dev.=113.3, n=16. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9548, critical = 0.844. Kappa = 2.076 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids [TDS] Analysis Run 5/17/2023 2:39 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1	MW-1
4/26/2016	0.0231 (J)	
6/20/2016	0.0227 (J)	
8/8/2016	0.0278 (J)	
8/24/2016	0.0247 (J)	
10/3/2016	0.0307 (J)	
10/26/2016	0.0241 (J)	
11/21/2016	0.0202 (J)	
1/17/2017	0.0201 (J)	
3/22/2017	0.0224 (J)	
4/18/2017	<0.1015	
5/30/2017	<0.1015	
8/23/2017	0.0253 (J)	
5/22/2018	0.0224 (J)	
6/12/2018	0.0214 (J)	
10/17/2018	0.0216 (J)	
11/19/2018	0.0237 (J)	
4/10/2019	0.0304 (J)	
5/14/2019	<0.1015	
10/8/2019	<0.1015	
10/16/2019	0.0385 (J)	
4/6/2020	<0.1015	
7/13/2020	<0.1015	
2/22/2021	0.0307 (J)	
7/12/2021		<0.1015
1/25/2022		<0.1015
7/5/2022		<0.1015
2/20/2023		<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-2	MW-2
4/25/2016	0.0241 (J)	
6/20/2016	0.0284 (J)	
8/8/2016	0.034 (J)	
8/24/2016	0.0316 (J)	
10/3/2016	0.0367 (J)	
10/26/2016	0.0331 (J)	
11/21/2016	0.035 (J)	
1/17/2017	0.0259 (J)	
3/22/2017	0.0243 (J)	
4/18/2017	0.0206 (J)	
5/31/2017	0.0234 (J)	
8/23/2017	0.0267 (J)	
5/22/2018	0.0251 (J)	
6/12/2018	0.0275 (J)	
10/17/2018	0.0321 (J)	
11/19/2018	0.0324 (J)	
4/10/2019	<0.1015	
5/14/2019	<0.1015	
10/8/2019	0.0371 (J)	
10/16/2019	0.0419 (J)	
4/6/2020	<0.1015	
7/13/2020	<0.1015	
2/22/2021	<0.1015	
7/12/2021		<0.1015
1/25/2022		<0.1015
7/5/2022		<0.1015
2/20/2023		<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-3	MW-3
4/25/2016	0.028 (J)	
6/22/2016	0.0433 (J)	
8/9/2016	0.0429 (J)	
8/24/2016	0.0431 (J)	
10/4/2016	0.04 (J)	
10/26/2016	0.0375 (J)	
11/21/2016	0.0406 (J)	
1/18/2017	0.0548 (J)	
3/22/2017	0.0344 (J)	
4/18/2017	<0.1015	
5/31/2017	0.0454 (J)	
8/23/2017	0.0425 (J)	
5/24/2018	0.0339 (J)	
6/12/2018	0.0371 (J)	
10/17/2018	0.0596 (J)	
11/19/2018	0.0514 (J)	
4/10/2019	<0.1015	
5/14/2019	<0.1015	
10/8/2019	0.0537 (J)	
10/16/2019	0.05 (J)	
4/6/2020	<0.1015	
7/13/2020	0.0366 (J)	
2/22/2021	<0.1015	
7/12/2021		<0.1015
1/25/2022		<0.1015
7/5/2022		0.0374 (J)
2/20/2023		<0.1015

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4	MW-4
4/25/2016	0.0414 (J)	
6/20/2016	0.0434 (J)	
8/9/2016	0.0453 (J)	
8/24/2016	0.0451 (J)	
10/3/2016	0.0511 (J)	
10/26/2016	0.0507 (J)	
11/21/2016	0.0458 (J)	
1/18/2017	0.0445 (J)	
3/22/2017	0.0432 (J)	
4/18/2017	0.0409 (J)	
5/31/2017	0.0392 (J)	
8/23/2017	0.042 (J)	
5/23/2018	0.0433 (J)	
6/12/2018	0.0478 (J)	
10/17/2018	0.0468 (J)	
11/19/2018	0.0526 (J)	
4/10/2019	0.0438 (J)	
5/14/2019	<0.203 (o)	
10/10/2019	0.0487 (J)	
10/16/2019	0.0505 (J)	
4/6/2020	0.0428 (J)	
7/14/2020	0.0441 (J)	
2/22/2021	0.0397 (J)	
7/12/2021		0.0411 (J)
1/25/2022		0.0408 (J)
7/5/2022		0.0433 (J)
2/21/2023		0.0408 (J)

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-5
4/25/2016	0.0301 (J)	
6/21/2016	0.0304 (J)	
10/12/2017	0.0285 (J)	
10/13/2017	0.0287 (J)	
10/14/2017	0.0305 (J)	
10/15/2017	0.0319 (J)	
10/16/2017	0.0304 (J)	
10/17/2017	0.036 (J)	
11/16/2017	0.0377 (J)	
5/23/2018	0.0301 (J)	
11/20/2018	0.0357 (J)	
5/14/2019	<0.203 (o)	
10/10/2019	0.0323 (J)	
4/7/2020	0.0399 (J)	
7/14/2020	0.033 (J)	
2/23/2021	0.0369 (J)	
7/21/2021		0.0319 (J)
1/31/2022		0.0314 (J)
7/6/2022		0.0355 (J)
2/21/2023		0.0315 (J)

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6	MW-6
4/27/2016	0.075 (J)	
6/21/2016	0.0729 (J)	
10/12/2017	0.0806 (J)	
10/13/2017	0.0803 (J)	
10/14/2017	0.0828 (J)	
10/15/2017	0.0852 (J)	
10/16/2017	0.0858 (J)	
10/17/2017	0.0846 (J)	
11/16/2017	0.0772 (J)	
5/23/2018	0.0757 (J)	
11/20/2018	0.0915 (J)	
5/15/2019	0.0616 (J)	
10/10/2019	0.0919 (J)	
4/8/2020	0.0499 (J)	
7/14/2020	0.0838 (J)	
2/23/2021	0.0866 (J)	
7/20/2021		0.0608 (J)
1/31/2022		0.0648 (J)
7/6/2022		0.069 (J)
2/22/2023		0.0356 (J)

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-7	MW-7
4/27/2016	0.253 (O)	
6/21/2016	0.0768 (J)	
10/12/2017	0.0685 (J)	
10/13/2017	0.0674 (J)	
10/14/2017	0.0756 (J)	
10/15/2017	0.0719 (J)	
10/16/2017	0.0726 (J)	
10/17/2017	0.0716 (J)	
11/16/2017	0.0644 (J)	
5/23/2018	0.0715 (J)	
11/20/2018	0.0772 (J)	
5/15/2019	0.0678 (J)	
10/8/2019	0.073 (J)	
4/8/2020	0.077 (J)	
7/14/2020	0.0865 (J)	
2/23/2021	0.0803 (J)	
7/20/2021		0.0721 (J)
1/31/2022		0.0689 (J)
7/6/2022		0.0752 (J)
2/21/2023		0.0645 (J)

Prediction Limit

Constituent: Boron, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-8	MW-8
4/27/2016	0.0662 (J)	
6/21/2016	0.0681 (J)	
10/12/2017	0.0687 (J)	
10/13/2017	0.0831 (J)	
10/14/2017	0.0702 (J)	
10/15/2017	0.0702 (J)	
10/16/2017	0.0707 (J)	
10/17/2017	0.0695 (J)	
11/16/2017	0.0675 (J)	
5/23/2018	0.0693 (J)	
11/20/2018	0.0771 (J)	
5/15/2019	0.0689 (J)	
10/9/2019	0.0723 (J)	
4/8/2020	0.0683 (J)	
7/15/2020	0.0723 (J)	
2/23/2021	0.0731 (J)	
7/20/2021		0.0656 (J)
2/1/2022		0.0639 (J)
7/6/2022		0.0686 (J)
2/21/2023		0.0609 (J)

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1	MW-1
4/26/2016	147	
6/20/2016	152	
8/8/2016	150	
8/24/2016	142	
10/3/2016	139	
10/26/2016	133	
11/21/2016	144	
1/17/2017	131	
3/22/2017	141	
4/18/2017	149	
5/30/2017	140	
8/23/2017	152	
5/22/2018	166	
6/12/2018	203	
10/17/2018	171	
11/19/2018	154	
4/10/2019	243	
5/14/2019	167	
10/8/2019	157	
10/16/2019	157	
4/6/2020	149	
7/13/2020	147	
2/22/2021	151	
7/12/2021		149
1/25/2022		150
7/5/2022		168
2/20/2023		151

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-2	MW-2
4/25/2016	123	
6/20/2016	168	
8/8/2016	180	
8/24/2016	180	
10/3/2016	184	
10/26/2016	171	
11/21/2016	179	
1/17/2017	188	
3/22/2017	155	
4/18/2017	156	
5/31/2017	151	
8/23/2017	155	
5/22/2018	172	
6/12/2018	179	
10/17/2018	200	
11/19/2018	221	
4/10/2019	200	
5/14/2019	168	
10/8/2019	190	
10/16/2019	194	
4/6/2020	152	
7/13/2020	163	
2/22/2021	178	
7/12/2021		159
1/25/2022		179
7/5/2022		172
2/20/2023		160

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-3	MW-3
4/25/2016	224	
6/22/2016	266	
8/9/2016	260	
8/24/2016	274	
10/4/2016	243	
10/26/2016	254	
11/21/2016	263	
1/18/2017	431	
3/22/2017	318	
4/18/2017	296	
5/31/2017	306	
8/23/2017	298	
5/24/2018	297	
6/12/2018	318	
10/17/2018	392	
11/19/2018	387	
4/10/2019	348	
5/14/2019	254	
10/8/2019	371	
10/16/2019	346	
4/6/2020	177	
7/13/2020	264	
2/22/2021	312	
7/12/2021		252
1/25/2022		285
7/5/2022		369
2/20/2023		210

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4	MW-4
4/25/2016	261	
6/20/2016	295	
8/9/2016	318	
8/24/2016	319	
10/3/2016	293	
10/26/2016	311	
11/21/2016	320	
1/18/2017	417	
3/22/2017	292	
4/18/2017	302	
5/31/2017	284	
8/23/2017	297	
5/23/2018	296	
6/12/2018	355	
10/17/2018	342	
11/19/2018	289	
4/10/2019	356	
5/14/2019	254	
10/10/2019	302	
10/16/2019	356	
4/6/2020	222	
7/14/2020	259	
2/22/2021	271	
7/12/2021		242
1/25/2022		259
7/5/2022		294
2/21/2023		232

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-5
4/25/2016	399	
6/21/2016	295	
10/12/2017	394	
10/13/2017	389	
10/14/2017	391	
10/15/2017	332	
10/16/2017	380	
10/17/2017	377	
11/16/2017	368	
5/23/2018	405	
11/20/2018	414	
5/14/2019	441	
10/10/2019	386	
4/7/2020	432	
7/14/2020	395	
2/23/2021	394	
7/21/2021		384
1/31/2022		398
7/6/2022		414
2/21/2023		367

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6	MW-6
4/27/2016	411	
6/21/2016	318	
10/12/2017	421	
10/13/2017	396	
10/14/2017	400	
10/15/2017	378	
10/16/2017	402	
10/17/2017	373	
11/16/2017	367	
5/23/2018	425	
11/20/2018	449	
5/15/2019	345	
10/10/2019	461	
4/8/2020	242	
7/14/2020	406	
2/23/2021	428	
7/20/2021		348
1/31/2022		385
7/6/2022		430
2/22/2023		250

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-7	MW-7
4/27/2016	198	
6/21/2016	327	
10/12/2017	317	
10/13/2017	302	
10/14/2017	283	
10/15/2017	294	
10/16/2017	284	
10/17/2017	294	
11/16/2017	299	
5/23/2018	321	
11/20/2018	306	
5/15/2019	302	
10/8/2019	294	
4/8/2020	280	
7/14/2020	261	
2/23/2021	292	
7/20/2021		254
1/31/2022		278
7/6/2022		280
2/21/2023		286

Prediction Limit

Constituent: Calcium, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-8	MW-8
4/27/2016	282	
6/21/2016	291	
10/12/2017	300	
10/13/2017	298	
10/14/2017	299	
10/15/2017	307	
10/16/2017	299	
10/17/2017	294	
11/16/2017	308	
5/23/2018	344	
11/20/2018	327	
5/15/2019	305	
10/9/2019	329	
4/8/2020	281	
7/15/2020	280	
2/23/2021	306	
7/20/2021		281
2/1/2022		284
7/6/2022		306
2/21/2023		327

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1	MW-1
4/26/2016	0.146 (J)	
6/20/2016	0.148 (J)	
8/8/2016	0.137 (J)	
8/24/2016	0.133 (J)	
10/3/2016	0.103 (J)	
10/26/2016	0.05 (J)	
11/21/2016	0.047 (J)	
1/17/2017	0.09 (J)	
3/22/2017	0.12	
4/18/2017	0.12	
5/30/2017	0.13	
8/23/2017	0.16	
2/13/2018	0.14	
5/22/2018	0.16	
6/12/2018	0.16	
10/17/2018	0.18	
11/19/2018	0.15	
4/10/2019	0.102	
5/14/2019	0.119	
10/8/2019	0.0924 (J)	
10/16/2019	0.0756 (J)	
4/6/2020	0.101	
7/13/2020	0.0678 (J)	
2/22/2021	0.082 (J)	
7/12/2021		0.125
1/25/2022		0.101
7/5/2022		0.11 (J)
2/20/2023		0.221

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-2	MW-2
4/25/2016	0.149 (J)	
6/20/2016	0.148 (J)	
8/8/2016	0.134 (J)	
8/24/2016	0.129 (J)	
10/3/2016	0.086 (J)	
10/26/2016	0.027 (J)	
11/21/2016	0.027 (J)	
1/17/2017	0.066 (J)	
3/22/2017	0.13	
4/18/2017	0.16	
5/31/2017	0.13	
8/23/2017	0.16	
2/13/2018	0.22	
5/22/2018	0.17	
6/12/2018	0.16	
10/17/2018	0.16	
11/19/2018	0.18	
4/10/2019	0.262	
5/14/2019	0.17	
10/8/2019	0.164	
10/16/2019	0.114	
4/6/2020	0.207	
7/13/2020	0.132	
2/22/2021	0.209	
7/12/2021		0.196
1/25/2022		0.204
7/5/2022		0.2
2/20/2023		0.267

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-3	MW-3
4/25/2016	0.243 (J)	
6/22/2016	0.269 (J)	
8/9/2016	0.363	
8/24/2016	0.346	
10/4/2016	0.266 (J)	
10/26/2016	0.266 (J)	
11/21/2016	0.244 (J)	
1/18/2017	0.385	
3/22/2017	0.41	
4/18/2017	0.29	
5/31/2017	0.37	
8/23/2017	0.55	
2/13/2018	0.27	
5/24/2018	0.6	
6/12/2018	0.53	
10/17/2018	0.63	
11/19/2018	0.31	
4/10/2019	0.273	
5/14/2019	0.281	
10/8/2019	0.225	
10/16/2019	0.106	
4/6/2020	0.314	
7/13/2020	0.13	
2/22/2021	0.246	
7/12/2021		0.287
1/25/2022		0.325
7/5/2022		0.386
2/20/2023		0.379

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4	MW-4
4/25/2016	0.372	
6/20/2016	0.361	
8/9/2016	0.326	
8/24/2016	0.329	
10/3/2016	0.287 (J)	
10/26/2016	0.194 (J)	
11/21/2016	0.192 (J)	
1/18/2017	0.223 (J)	
3/22/2017	0.32	
4/18/2017	0.32	
5/31/2017	0.31	
8/23/2017	0.38	
2/13/2018	0.38	
5/23/2018	0.38	
6/12/2018	0.39	
10/17/2018	0.39	
11/19/2018	0.36	
4/10/2019	0.384	
5/14/2019	0.335	
10/10/2019	0.304	
10/16/2019	0.302	
4/6/2020	0.368	
7/14/2020	0.33	
2/22/2021	0.357	
7/12/2021		0.35
1/25/2022		0.364
7/5/2022		0.362
2/21/2023		0.415

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-5
4/25/2016	0.307	
6/21/2016	0.337	
10/12/2017	0.35	
10/13/2017	0.36	
10/14/2017	0.37	
10/15/2017	0.37	
10/16/2017	0.36	
10/17/2017	0.35	
11/16/2017	0.37	
2/14/2018	0.33	
5/23/2018	0.29	
11/20/2018	0.32	
5/14/2019	0.22	
10/10/2019	0.338	
4/7/2020	0.225	
7/14/2020	0.263	
2/23/2021	0.287	
7/21/2021		0.331
1/31/2022		0.291
7/6/2022		0.306
2/21/2023		0.319

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6	MW-6
4/27/2016	0.131 (J)	
6/21/2016	0.153 (J)	
10/12/2017	0.15	
10/13/2017	0.15	
10/14/2017	0.14	
10/15/2017	0.14	
10/16/2017	0.14	
10/17/2017	0.14	
11/16/2017	0.14	
2/14/2018	0.13	
5/23/2018	0.13	
11/20/2018	0.14	
5/15/2019	0.133	
10/10/2019	0.124	
4/8/2020	<0.1 (o)	
7/14/2020	0.115	
2/23/2021	0.139	
7/20/2021		0.131
1/31/2022		0.121
7/6/2022		0.147
2/22/2023		0.173

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-7	MW-7
4/27/2016	0.2 (J)	
6/21/2016	0.163 (J)	
10/12/2017	0.17	
10/13/2017	0.19	
10/14/2017	0.2	
10/15/2017	0.2	
10/16/2017	0.2	
10/17/2017	0.19	
11/16/2017	0.18	
2/14/2018	0.18	
5/23/2018	0.18	
11/20/2018	0.19	
5/15/2019	0.169	
10/8/2019	0.183	
4/8/2020	0.153	
7/14/2020	0.193	
2/23/2021	0.2	
7/20/2021		0.286
1/31/2022		0.173
7/6/2022		0.208
2/21/2023		0.216

Prediction Limit

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-8	MW-8
4/27/2016	0.212 (J)	
6/21/2016	0.211 (J)	
10/12/2017	0.22	
10/13/2017	0.23	
10/14/2017	0.22	
10/15/2017	0.22	
10/16/2017	0.22	
10/17/2017	0.21	
11/16/2017	0.22	
2/14/2018	0.21	
5/23/2018	0.21	
11/20/2018	0.21	
5/15/2019	0.192	
10/9/2019	0.189	
4/8/2020	0.192	
7/15/2020	0.196	
2/23/2021	0.208	
7/20/2021		0.262
2/1/2022		0.177
7/6/2022		0.173
2/21/2023		0.212

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1	MW-1
4/26/2016	1490	
6/20/2016	1420	
8/8/2016	1460	
8/24/2016	1450	
10/3/2016	1460	
10/26/2016	1330	
11/21/2016	1420	
1/17/2017	1350	
3/22/2017	1500	
4/18/2017	1300	
5/30/2017	1400	
8/23/2017	1500	
5/22/2018	2100 (o)	
6/12/2018	1500	
10/17/2018	1400	
11/19/2018	1300	
4/10/2019	1700	
5/14/2019	1560	
10/8/2019	1540	
10/16/2019	1680	
4/6/2020	1530	
7/13/2020	1450	
2/22/2021	1400	
7/12/2021		1560
1/25/2022		1430
7/5/2022		1600
2/20/2023		1520

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-2	MW-2
4/25/2016	745	
6/20/2016	964	
8/8/2016	1100	
8/24/2016	1130	
10/3/2016	1140	
10/26/2016	1060	
11/21/2016	1100	
1/17/2017	1160	
3/22/2017	900	
4/18/2017	870	
5/31/2017	1100	
8/23/2017	920	
5/22/2018	1200	
6/12/2018	860	
10/17/2018	970	
11/19/2018	1000	
4/10/2019	889	
5/14/2019	948	
10/8/2019	1230	
10/16/2019	1170	
4/6/2020	786	
7/13/2020	843	
2/22/2021	864	
7/12/2021		763
1/25/2022		842
7/5/2022		819
2/20/2023		767

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-3	MW-3
4/25/2016	1890	
6/22/2016	2100	
8/9/2016	2050	
8/24/2016	2190	
10/4/2016	1950	
10/26/2016	1980	
11/21/2016	2060	
1/18/2017	2620	
3/22/2017	3200	
4/18/2017	2500	
5/31/2017	2800	
8/23/2017	2600	
5/24/2018	2700	
6/12/2018	2500	
10/17/2018	2700	
11/19/2018	3000	
4/10/2019	2460	
5/14/2019	2460	
10/8/2019	2950	
10/16/2019	2820	
4/6/2020	1670	
7/13/2020	2130	
2/22/2021	3040	
7/12/2021		2380
1/25/2022		2550
7/5/2022		3110
2/20/2023		2110

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4	MW-4
4/25/2016	2260	
6/20/2016	2500	
8/9/2016	2750	
8/24/2016	2770	
10/3/2016	3060	
10/26/2016	2650	
11/21/2016	2720	
1/18/2017	2650	
3/22/2017	2700	
4/18/2017	2400	
5/31/2017	2700	
8/23/2017	2700	
5/23/2018	2400	
6/12/2018	2600	
10/17/2018	2600	
11/19/2018	2400	
4/10/2019	2090	
5/14/2019	2240	
10/10/2019	2690	
10/16/2019	3050	
4/6/2020	1810	
7/14/2020	1970	
2/22/2021	2040	
7/12/2021		1930
1/25/2022		1930
7/5/2022		2380
2/21/2023		1930

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-5
4/25/2016	2390	
6/21/2016	2500	
10/12/2017	2300	
10/13/2017	2300	
10/14/2017	2300	
10/15/2017	2300	
10/16/2017	2300	
10/17/2017	2200	
11/16/2017	2200	
5/23/2018	2400	
11/20/2018	2500	
5/14/2019	2380	
10/10/2019	2460	
4/7/2020	2050	
7/14/2020	2080	
2/23/2021	2210	
7/21/2021		2240
1/31/2022		2310
7/6/2022		2320
2/21/2023		2210

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6	MW-6
4/27/2016	2090	
6/21/2016	2000	
10/12/2017	2000	
10/13/2017	2000	
10/14/2017	1900	
10/15/2017	1900	
10/16/2017	1900	
10/17/2017	1900	
11/16/2017	1800	
5/23/2018	2000	
11/20/2018	2200	
5/15/2019	2110	
10/10/2019	2330	
4/8/2020	1900	
7/14/2020	1970	
2/23/2021	2010	
7/20/2021		1930
1/31/2022		2080
7/6/2022		2100
2/22/2023		1870

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-7	MW-7
4/27/2016	1050	
6/21/2016	1410	
10/12/2017	1400	
10/13/2017	1400	
10/14/2017	1300	
10/15/2017	1300	
10/16/2017	1300	
10/17/2017	1300	
11/16/2017	1300	
5/23/2018	1900 (O)	
11/20/2018	1100	
5/15/2019	1510	
10/8/2019	1570	
4/8/2020	1270	
7/14/2020	1330	
2/23/2021	1320	
7/20/2021		1170
1/31/2022		1370
7/6/2022		1330
2/21/2023		1450

Prediction Limit

Constituent: Sulfate as SO4 (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-8	MW-8
4/27/2016	1550	
6/21/2016	1470	
10/12/2017	1400	
10/13/2017	1600	
10/14/2017	1400	
10/15/2017	1400	
10/16/2017	1400	
10/17/2017	1400	
11/16/2017	1400	
5/23/2018	2100 (o)	
11/20/2018	1400	
5/15/2019	1640	
10/9/2019	1550	
4/8/2020	1380	
7/15/2020	1410	
2/23/2021	1420	
7/20/2021		1500
2/1/2022		1500
7/6/2022		1460
2/21/2023		1510

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-1	MW-1
4/26/2016	2080	
6/20/2016	2060	
8/8/2016	2070	
8/24/2016	2040	
10/3/2016	2110	
10/26/2016	2000	
11/21/2016	2070	
1/17/2017	1930	
3/22/2017	2060	
4/18/2017	2140	
5/30/2017	2240	
8/23/2017	2160	
5/22/2018	2380	
6/12/2018	2400	
10/17/2018	2220	
11/19/2018	2360	
4/10/2019	2630	
5/14/2019	2340	
10/8/2019	2330	
10/16/2019	3650 (o)	
4/6/2020	2240	
7/13/2020	2240	
2/22/2021	2230	
7/12/2021		2210
1/25/2022		2150
7/5/2022		2100
2/20/2023		2280

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-2	MW-2
4/25/2016	1260	
6/20/2016	1620	
8/8/2016	1740	
8/24/2016	1720	
10/3/2016	1800	
10/26/2016	1800	
11/21/2016	1740	
1/17/2017	1960	
3/22/2017	1510	
4/18/2017	1580	
5/31/2017	1730	
8/23/2017	1550	
5/22/2018	1500	
6/12/2018	1550	
10/17/2018	1740	
11/19/2018	1990	
4/10/2019	1250	
5/14/2019	1480	
10/8/2019	1840	
10/16/2019	1830	
4/6/2020	1440	
7/13/2020	1540	
2/22/2021	1620	
7/12/2021		1390
1/25/2022		1500
7/5/2022		1250
2/20/2023		1420

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-3	MW-3
4/25/2016	2720	
6/22/2016	3250	
8/9/2016	3050	
8/24/2016	3080	
10/4/2016	2900	
10/26/2016	2940	
11/21/2016	3090	
1/18/2017	4020	
3/22/2017	4180	
4/18/2017	4440	
5/31/2017	3970	
8/23/2017	4050	
5/24/2018	3680	
6/12/2018	3820	
10/17/2018	4730	
11/19/2018	4710	
4/10/2019	3680	
5/14/2019	3580	
10/8/2019	4720	
10/16/2019	4210	
4/6/2020	2630	
7/13/2020	3650	
2/22/2021	4670	
7/12/2021		3510
1/25/2022		3950
7/5/2022		4220
2/20/2023		3230

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4	MW-4
4/25/2016	3300	
6/20/2016	3870	
8/9/2016	4140	
8/24/2016	4190	
10/3/2016	4190	
10/26/2016	4400	
11/21/2016	4230	
1/18/2017	4120	
3/22/2017	3980	
4/18/2017	3880	
5/31/2017	4210	
8/23/2017	3990	
5/23/2018	3740	
6/12/2018	4080	
10/17/2018	4250	
11/19/2018	3920	
4/10/2019	3280	
5/14/2019	3130 (D)	
10/10/2019	4000	
10/16/2019	4060	
4/6/2020	2820	
7/14/2020	3310	
2/22/2021	3190	
7/12/2021		3000
1/25/2022		3180
7/5/2022		3240
2/21/2023		3160

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-5
4/25/2016	3660	
6/21/2016	3920	
10/12/2017	4000	
10/13/2017	3960	
10/14/2017	3910	
10/15/2017	3890	
10/16/2017	3980	
10/17/2017	3940	
11/16/2017	3930	
5/23/2018	3660	
11/20/2018	3780	
5/14/2019	3520	
10/10/2019	3830	
4/7/2020	3270	
7/14/2020	3710	
2/23/2021	3740	
7/21/2021		3570
1/31/2022		3560
7/6/2022		3390
2/21/2023		3310

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6	MW-6
4/27/2016	3290	
6/21/2016	3250	
10/12/2017	3220	
10/13/2017	3250	
10/14/2017	3260	
10/15/2017	3260	
10/16/2017	3360	
10/17/2017	3420	
11/16/2017	3280	
5/23/2018	3340	
11/20/2018	3330	
5/15/2019	3130	
10/10/2019	3260	
4/8/2020	2940	
7/14/2020	3270	
2/23/2021	3230	
7/20/2021		3090
1/31/2022		3050
7/6/2022		3110
2/22/2023		2790

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-7	MW-7
4/27/2016	1640	
6/21/2016	2460	
10/12/2017	2460	
10/13/2017	2420	
10/14/2017	2320	
10/15/2017	1150	
10/16/2017	2320	
10/17/2017	2360	
11/16/2017	2460	
5/23/2018	2390	
11/20/2018	2090	
5/15/2019	2310	
10/8/2019	2340	
4/8/2020	2230	
7/14/2020	2210	
2/23/2021	2320	
7/20/2021		2110
1/31/2022		2140
7/6/2022		2110
2/21/2023		2220

Prediction Limit

Constituent: Total Dissolved Solids [TDS] (mg/L) Analysis Run 5/17/2023 2:40 PM View: Appendix III - Intrawell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-8	MW-8
4/27/2016	2480	
6/21/2016	2360	
10/12/2017	2530	
10/13/2017	2740	
10/14/2017	2630	
10/15/2017	2530	
10/16/2017	2740	
10/17/2017	2650	
11/16/2017	2650	
5/23/2018	2750	
11/20/2018	2520	
5/15/2019	2540	
10/9/2019	2590	
4/8/2020	2450	
7/15/2020	2460	
2/23/2021	2550	
7/20/2021		2420
2/1/2022		2420
7/6/2022		2320
2/21/2023		2370

FIGURE E.

Appendix III Interwell Prediction Limits - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chloride, Total (mg/L)	**MW-5**	**4.6**	**n/a**	**2/21/2023**	**5.25**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**MW-7**	**4.6**	**n/a**	**2/21/2023**	**6.12**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**MW-8**	**4.6**	**n/a**	**2/21/2023**	**4.86**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-5**	**6.35**	**4.51**	**2/21/2023**	**6.5**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-7**	**6.35**	**4.51**	**2/21/2023**	**6.72**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-8**	**6.35**	**4.51**	**2/21/2023**	**6.75**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**

Appendix III Interwell Prediction Limits - All Results

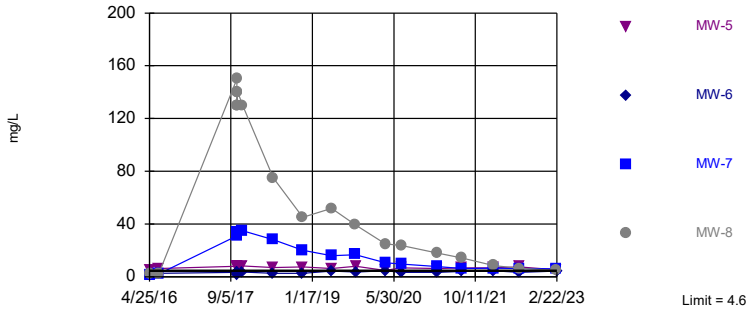
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:42 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Chloride, Total (mg/L)	**MW-5**	**4.6**	**n/a**	**2/21/2023**	**5.25**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	MW-6	4.6	n/a	2/22/2023	4.37	No	108	n/a	n/a	2.778	n/a	n/a	0.0001702	NP Inter (normality) 1 of 2
Chloride, Total (mg/L)	**MW-7**	**4.6**	**n/a**	**2/21/2023**	**6.12**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
Chloride, Total (mg/L)	**MW-8**	**4.6**	**n/a**	**2/21/2023**	**4.86**	**Yes**	**108**	**n/a**	**n/a**	**2.778**	**n/a**	**n/a**	**0.0001702**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-5**	**6.35**	**4.51**	**2/21/2023**	**6.5**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	MW-6	6.35	4.51	2/22/2023	4.98	No	109	n/a	n/a	0	n/a	n/a	0.0003345	NP Inter (normality) 1 of 2
pH, Field (SU)	**MW-7**	**6.35**	**4.51**	**2/21/2023**	**6.72**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**
pH, Field (SU)	**MW-8**	**6.35**	**4.51**	**2/21/2023**	**6.75**	**Yes**	**109**	**n/a**	**n/a**	**0**	**n/a**	**n/a**	**0.0003345**	**NP Inter (normality) 1 of 2**

Exceeds Limit: MW-5, MW-7, MW-8

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 108 background values. 2.778% NDs. Annual per-constituent alpha = 0.001361. Individual comparison alpha = 0.0001702 (1 of 2). Comparing 4 points to limit.

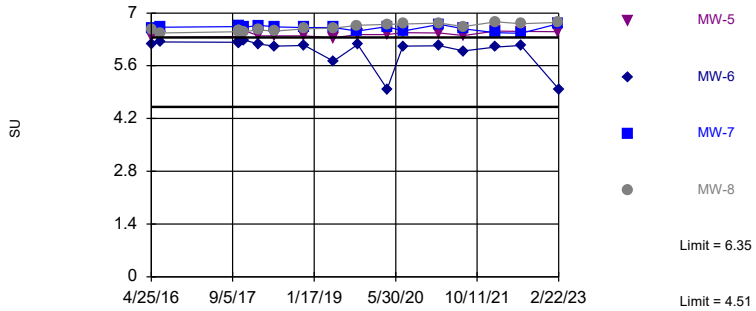
Constituent: Chloride, Total Analysis Run 5/17/2023 2:41 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Exceeds Limits: MW-5, MW-7, MW-8

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 109 background values. Annual per-constituent alpha = 0.002675. Individual comparison alpha = 0.0003345 (1 of 2). Comparing 4 points to limit.

Constituent: pH, Field Analysis Run 5/17/2023 2:41 PM View: Appendix III - Interwell
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 5/17/2023 2:42 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4 (bg)	MW-5	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	MW-6	MW-7	MW-8
4/25/2016	1.53	5.44	1.32	1.9				
4/26/2016					1.94			
4/27/2016						2.19	1.71	2.34
6/20/2016	1.85			3.43	2.09			
6/21/2016		6.32				2.56	2.04	2.29
6/22/2016			1.46					
8/8/2016				3.31	2.18			
8/9/2016	1.95		1.35					
8/24/2016	2.07		1.47	3.23	2.22			
10/3/2016	2.02			3.21	2.34			
10/4/2016			1.59					
10/26/2016	2.07		1.27	3.35	2.34			
11/21/2016	2.39		1.38	3.34	2.5			
1/17/2017				3.58	2.68			
1/18/2017	1.9		1.34					
3/22/2017	1.5 (J)		2	3.4	3.7			
4/18/2017	1.6 (J)		2.2	2.6	2.4			
5/30/2017					2.6			
5/31/2017	2.1		1.5 (J)	4.4				
8/23/2017	2.3		1.8 (J)	4.4	2.7			
10/12/2017		7.9				3.4	31	150
10/13/2017		8 (B)				3 (B)	32 (B)	130 (B)
10/14/2017		7.4				2.8	33	140
10/15/2017		7.2				1.9 (J)	34	130
10/16/2017		8.1				1.8 (J)	34	140
10/17/2017		7.9				3.1	34	140
11/16/2017		8.1				3.5	35	130
5/22/2018				3.2	2.3			
5/23/2018	2	7				2.6	28	75
5/24/2018			1.6 (J)					
6/12/2018	1.7 (J)		1.4 (J)	3.7	2.3			
10/17/2018	1.5 (J)		<2	4.6	1.7 (J)			
11/19/2018	<2		<2	3	1.7 (J)			
11/20/2018		7.4				2.7	20	45
4/10/2019	1.88		2.25	1.76	2.36			
5/14/2019	1.82	6.24	2.28	2.98	2.28			
5/15/2019						4.45	15.9	52
10/8/2019			1.36	4.26	2.31		16.8	
10/9/2019								39.2
10/10/2019	1.93	7.88				3.61		
10/16/2019	1.92		1.4	4.04	2.42			
4/6/2020	1.5		1.72	2.43	2.01			
4/7/2020		4.83						
4/8/2020						4.63	10.6	24.9
7/13/2020			1.34	4.05	2.1			
7/14/2020	1.61	6.84				3.25	9.68	
7/15/2020								23.8
2/22/2021	1.52		2.22	1.72	2.16			
2/23/2021		6.19				3.47	7.85	17.9
7/12/2021	1.56		2.13	2.36	2.19			
7/20/2021						4.04	6.35	14.3
7/21/2021		6.73						

ND substitution: RL or RL/2 if <15% NDs.

Prediction Limit

Constituent: Chloride, Total (mg/L) Analysis Run 5/17/2023 2:42 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-4 (bg)	MW-5	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	MW-6	MW-7	MW-8
1/25/2022	1.54		2.12	2.14	2.09			
1/31/2022		6.87				4.53	6.4	
2/1/2022								8.56
7/5/2022	1.63		1.59	2.53	2.07			
7/6/2022		7.51				3.36	6.25	6.5
2/20/2023			1.94	1.7	2.05			
2/21/2023	1.58	5.25					6.12	4.86
2/22/2023						4.37		

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 5/17/2023 2:42 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	MW-6	MW-8	MW-7
4/25/2016	6.37	6.22	5.56	5.94				
4/26/2016					5.2			
4/27/2016						6.18	6.55	6.6
6/20/2016		6.21		5.96	5.18			
6/21/2016	6.35					6.23	6.47	6.62
6/22/2016			5.57					
8/8/2016				5.88	5.12			
8/9/2016		6.11	5.67					
8/24/2016		6.11	5.63					
10/3/2016		6.13		5.91	5.21			
10/4/2016			5.69					
10/26/2016		6.12	5.56	5.84	5.2			
11/21/2016		6.09	5.42	5.82	5.19			
1/17/2017				5.87	5.17			
1/18/2017		6.09	5.11					
3/22/2017		6.15	4.52	6.01	5.2			
4/18/2017		6.19	5.84	6.02	5.2			
5/30/2017					5.14			
5/31/2017		6.13	4.56	5.85				
8/23/2017		6.12	4.77	5.89	5.12			
10/12/2017	6.38					6.22	6.5	6.64
10/13/2017	6.43					6.23	6.51	6.64
10/14/2017	6.41					6.22	6.53	6.66
10/15/2017	6.42					6.22	6.53	6.67
10/16/2017	6.42					6.21	6.54	6.67
10/17/2017	6.41					6.2	6.54	6.66
11/16/2017	6.53					6.28	6.51	6.62
2/13/2018		6.22	5.67	6.21	5.18			
2/14/2018	6.39					6.17	6.55	6.67
5/22/2018				6.04	5.2			
5/23/2018	6.39	6.21				6.12	6.52	6.63
5/24/2018			5.19					
6/12/2018		6.16	4.79	5.95	5.15			
10/17/2018		6.12	4.75	5.9	5.12			
11/19/2018		6.16	3.77 (o)	6.03	5.09			
11/20/2018	6.39					6.14	6.58	6.61
4/10/2019		6.14	5.54	6.1	5.11			
5/14/2019	6.34	6.23	5.71	6.07	5.19			
5/15/2019						5.72	6.6	6.61
10/8/2019			4.98	5.96	5.12			6.52
10/9/2019							6.67	
10/10/2019	6.43	6.15				6.16		
10/16/2019		6.19	4.51	5.98	5.16			
4/6/2020		6.35	5.91	6.21	5.21			
4/7/2020	6.43							
4/8/2020						4.98	6.7	6.64
7/13/2020			5.16	5.84	5.14			
7/14/2020	6.48	6.2				6.12		6.52
7/15/2020							6.71	
2/22/2021		6.19	5.59	6.1	5.06			
2/23/2021	6.47					6.13	6.73	6.7
7/12/2021		6.06	5.86	6.16	5.13			

Prediction Limit

Constituent: pH, Field (SU) Analysis Run 5/17/2023 2:42 PM View: Appendix III - Interwell

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-4 (bg)	MW-3 (bg)	MW-2 (bg)	MW-1 (bg)	MW-6	MW-8	MW-7
7/20/2021						5.99	6.64	6.58
7/21/2021	6.4							
1/25/2022		6.3	5.9	6.22	5.11			
1/31/2022	6.52					6.1		6.48
2/1/2022							6.77	
7/5/2022		6.12	5.34	6.15	5.01			
7/6/2022	6.51					6.14	6.72	6.46
2/20/2023			6.01	6.24	5.07			
2/21/2023	6.5	6.35					6.75	6.72
2/22/2023						4.98		

FIGURE F.

Trend Tests - Prediction Limit Exceedances - Significant Results

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:44 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride, Total (mg/L)	**MW-8**	**-23.35**	**-100**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride, total (mg/L)	**MW-2 (bg)**	**0.01459**	**183**	**131**	**Yes**	**28**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-1 (bg)**	**-0.01675**	**-154**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-2 (bg)**	**0.04641**	**169**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-8**	**0.04545**	**156**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Tests - Prediction Limit Exceedances - All Results

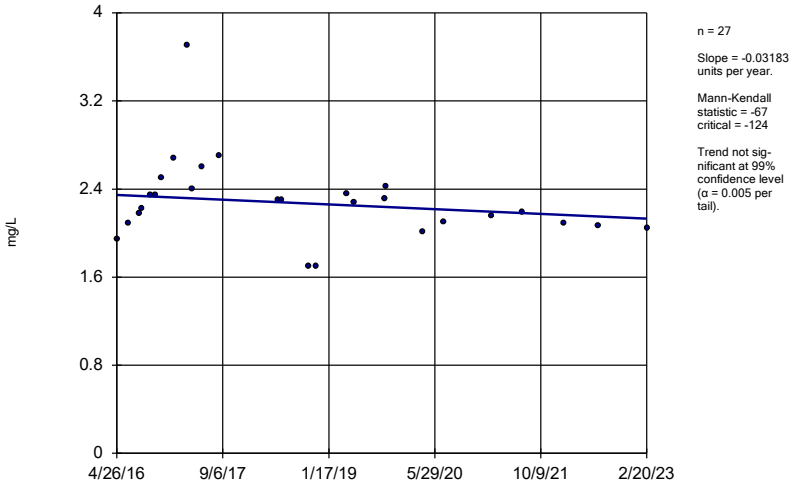
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:44 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Chloride, Total (mg/L)	MW-1 (bg)	-0.03183	-67	-124	No	27	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-2 (bg)	-0.144	-72	-124	No	27	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-3 (bg)	0.07161	89	124	No	27	7.407	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-4 (bg)	-0.06041	-97	-124	No	27	3.704	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-5	-0.1261	-43	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	MW-7	-4.869	-73	-81	No	20	0	n/a	n/a	0.01	NP
Chloride, Total (mg/L)	**MW-8**	**-23.35**	**-100**	**-81**	**Yes**	**20**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride, total (mg/L)	MW-1 (bg)	-0.003095	-33	-131	No	28	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	**MW-2 (bg)**	**0.01459**	**183**	**131**	**Yes**	**28**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Fluoride, total (mg/L)	MW-3 (bg)	0.002778	21	131	No	28	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-4 (bg)	0.007162	85	131	No	28	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-6	-0.00234	-54	-81	No	20	0	n/a	n/a	0.01	NP
Fluoride, total (mg/L)	MW-7	0.001693	32	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	**MW-1 (bg)**	**-0.01675**	**-154**	**-124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	**MW-2 (bg)**	**0.04641**	**169**	**124**	**Yes**	**27**	**0**	**n/a**	**n/a**	**0.01**	**NP**
pH, Field (SU)	MW-3 (bg)	0.03562	35	124	No	27	0	n/a	n/a	0.01	NP
pH, Field (SU)	MW-4 (bg)	0.01607	93	131	No	28	0	n/a	n/a	0.01	NP
pH, Field (SU)	MW-5	0.01884	86	87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	MW-7	-0.01489	-38	-87	No	21	0	n/a	n/a	0.01	NP
pH, Field (SU)	**MW-8**	**0.04545**	**156**	**87**	**Yes**	**21**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = -0.03183 units per year.

Mann-Kendall statistic = -67
critical = -124

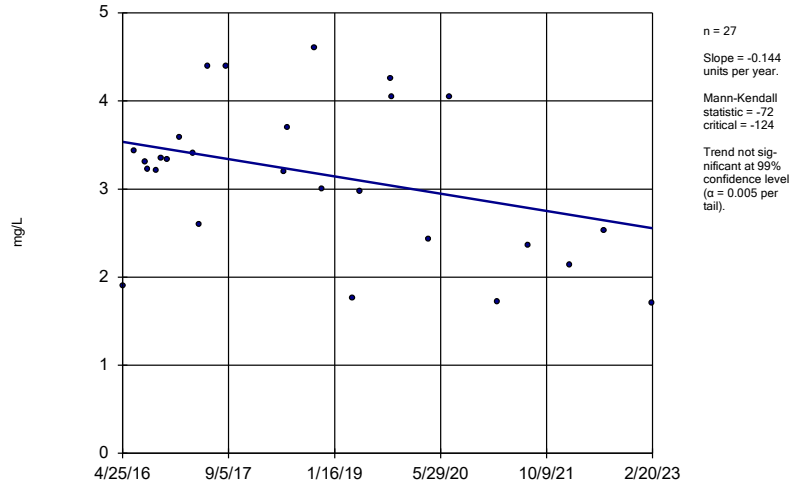
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = -0.144 units per year.

Mann-Kendall statistic = -72
critical = -124

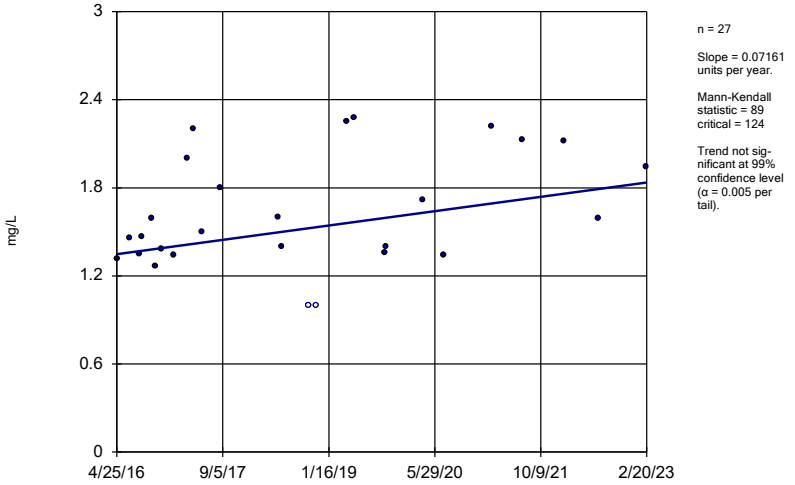
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 0.07161 units per year.

Mann-Kendall statistic = 89
critical = 124

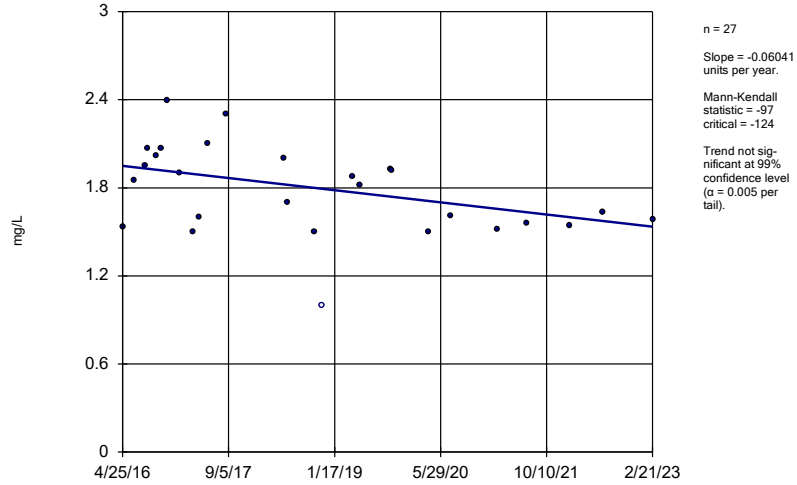
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG
Hollow symbols indicate censored values.

Sen's Slope Estimator

MW-4 (bg)



n = 27

Slope = -0.06041 units per year.

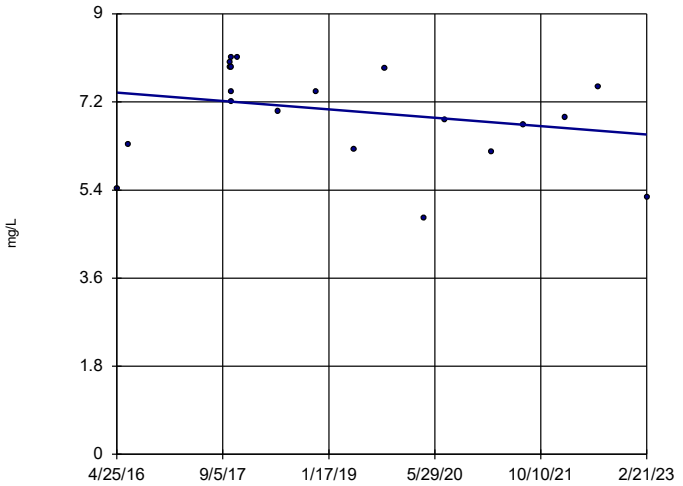
Mann-Kendall statistic = -97
critical = -124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sen's Slope Estimator

MW-5



n = 20

Slope = -0.1261 units per year.

Mann-Kendall statistic = -43 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

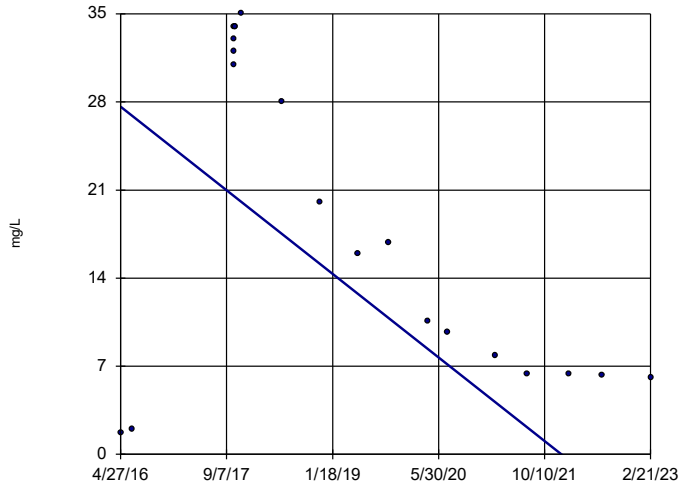
Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 20

Slope = -4.869 units per year.

Mann-Kendall statistic = -73 critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

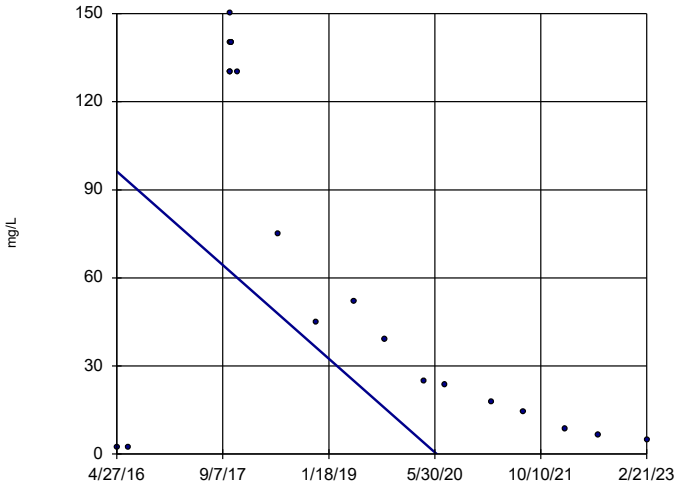
Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 20

Slope = -23.35 units per year.

Mann-Kendall statistic = -100 critical = -81

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

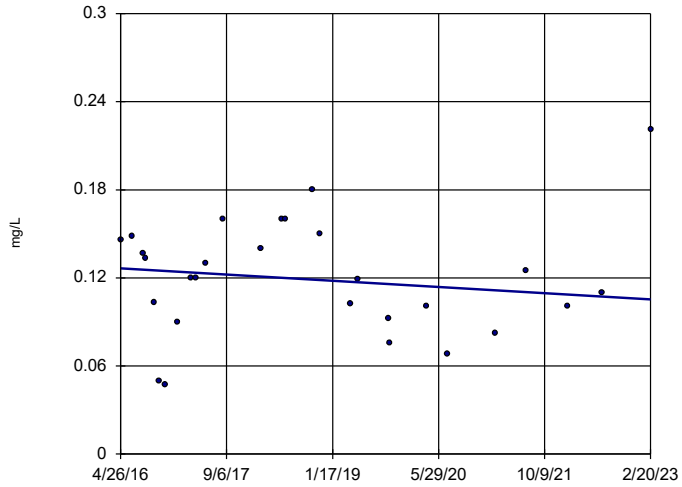
Constituent: Chloride, Total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 28

Slope = -0.003095 units per year.

Mann-Kendall statistic = -33 critical = -131

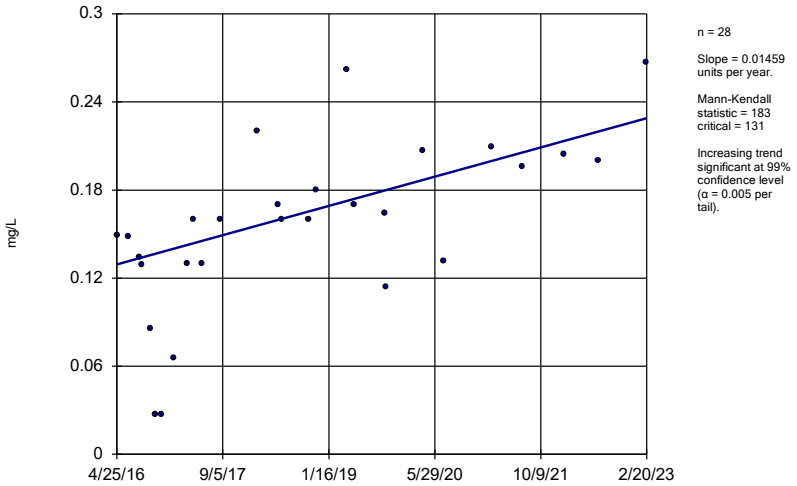
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride, total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sen's Slope Estimator

MW-2 (bg)



n = 28

Slope = 0.01459 units per year.

Mann-Kendall statistic = 183
critical = 131

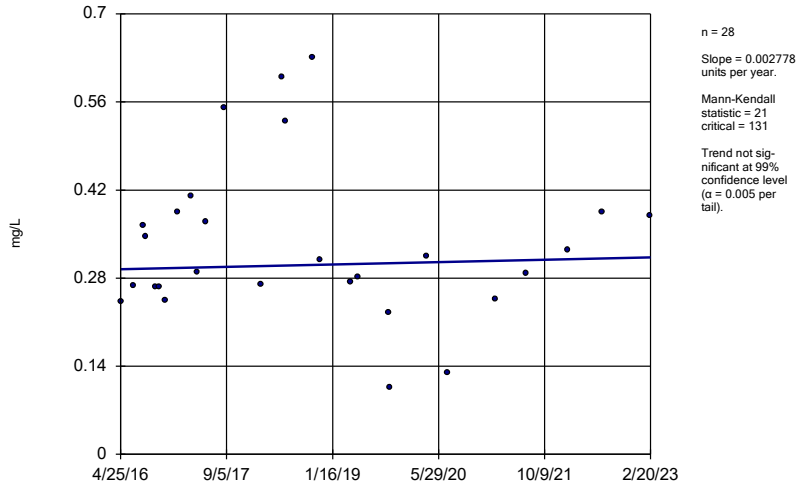
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride, total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 28

Slope = 0.002778 units per year.

Mann-Kendall statistic = 21
critical = 131

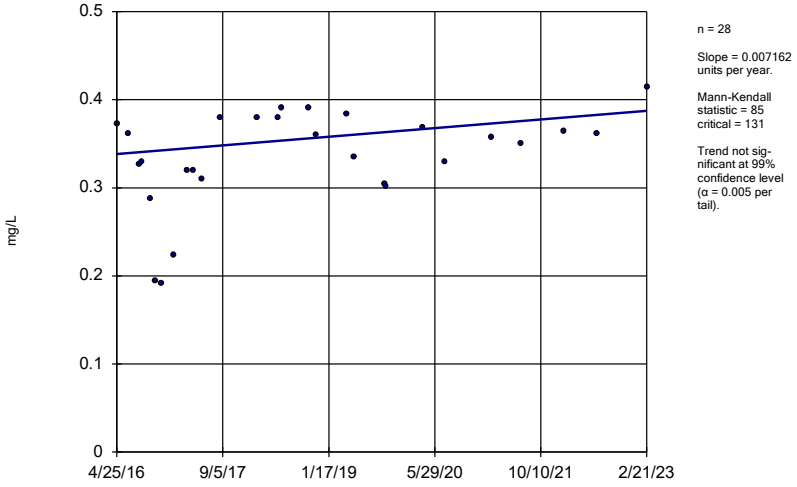
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride, total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = 0.007162 units per year.

Mann-Kendall statistic = 85
critical = 131

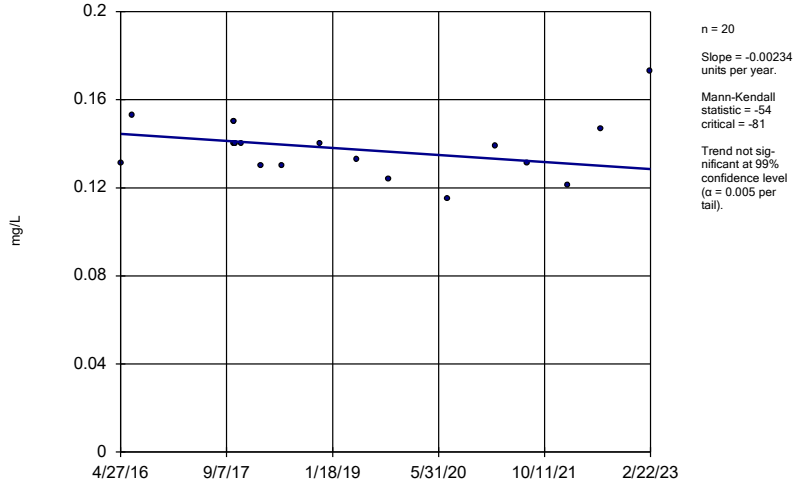
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride, total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-6



n = 20

Slope = -0.00234 units per year.

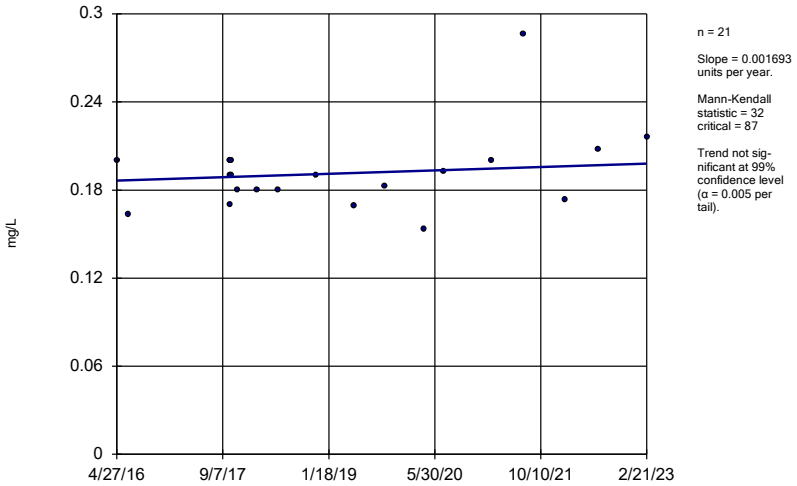
Mann-Kendall statistic = -54
critical = -81

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride, total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sen's Slope Estimator

MW-7



n = 21

Slope = 0.001693 units per year.

Mann-Kendall statistic = 32
critical = 87

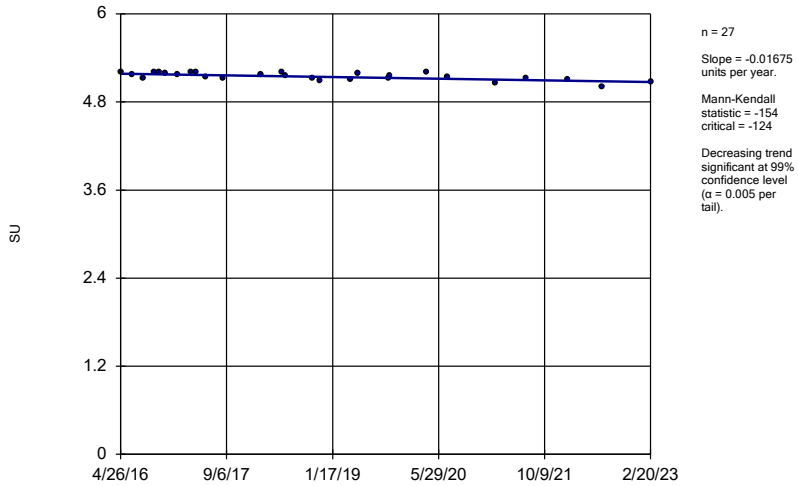
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Fluoride, total Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-1 (bg)



n = 27

Slope = -0.01675 units per year.

Mann-Kendall statistic = -154
critical = -124

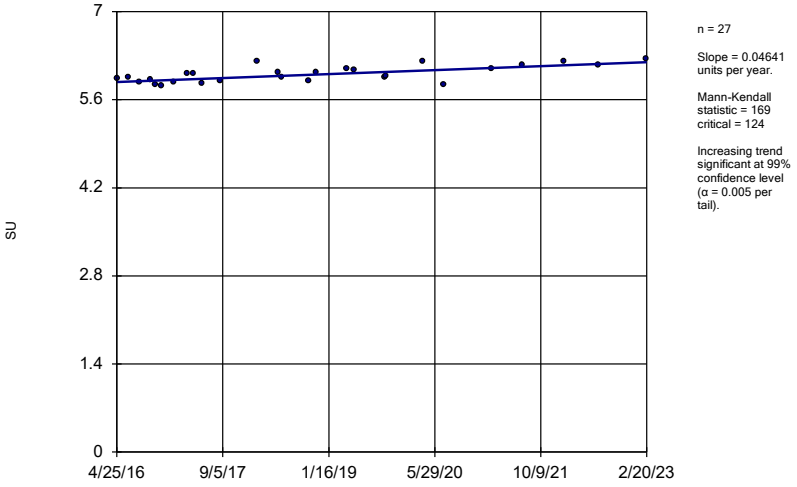
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-2 (bg)



n = 27

Slope = 0.04641 units per year.

Mann-Kendall statistic = 169
critical = 124

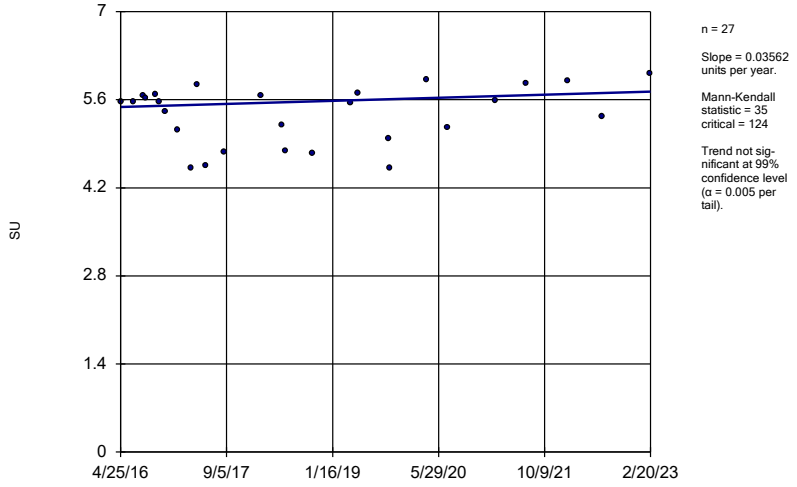
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-3 (bg)



n = 27

Slope = 0.03562 units per year.

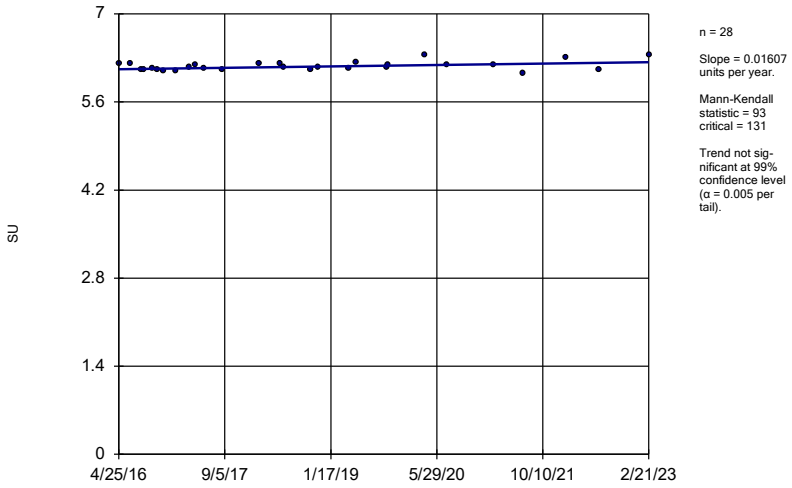
Mann-Kendall statistic = 35
critical = 124

Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sen's Slope Estimator

MW-4 (bg)



n = 28

Slope = 0.01607 units per year.

Mann-Kendall statistic = 93
critical = 131

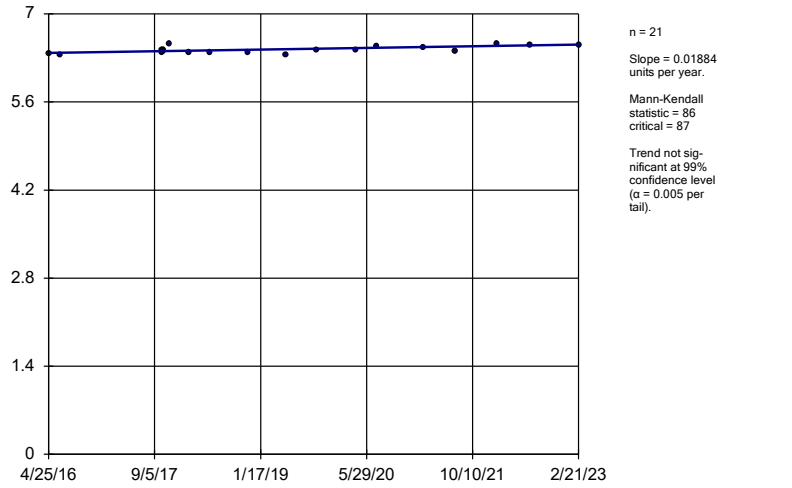
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-5



n = 21

Slope = 0.01884 units per year.

Mann-Kendall statistic = 86
critical = 87

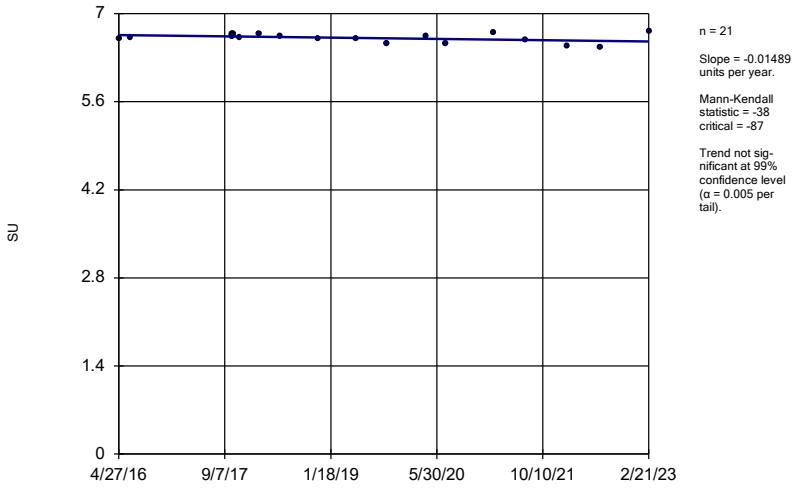
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-7



n = 21

Slope = -0.01489 units per year.

Mann-Kendall statistic = -38
critical = -87

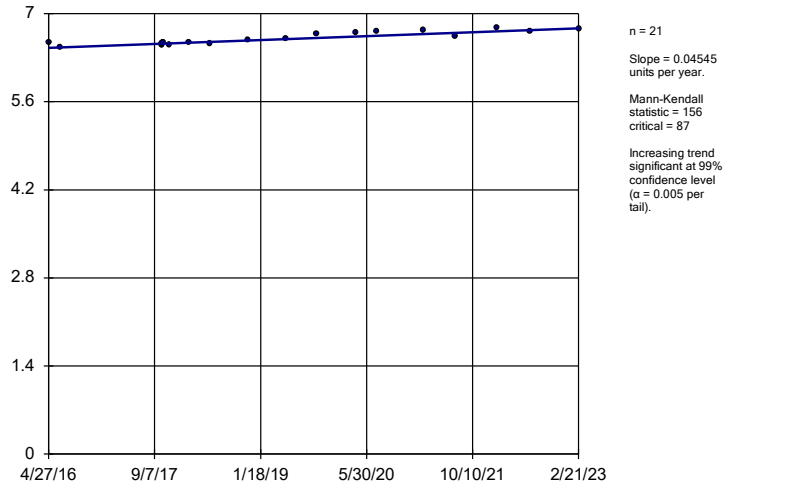
Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Sanitas™ v.9.6.37 Groundwater Stats Consulting. UG

Sen's Slope Estimator

MW-8



n = 21

Slope = 0.04545 units per year.

Mann-Kendall statistic = 156
critical = 87

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: pH, Field Analysis Run 5/17/2023 2:43 PM View: Appendix III - Trend Tests
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

FIGURE G.

Upper Tolerance Limits Summary Table

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 11/16/2021, 10:57 AM

Constituent	Well	Upper Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Antimony (mg/L)	n/a	0.00143	n/a	n/a	n/a	96	n/a	n/a	93.75	n/a	n/a	0.007269	NP Inter
Arsenic (mg/L)	n/a	0.005	n/a	n/a	n/a	96	n/a	n/a	83.33	n/a	n/a	0.007269	NP Inter
Barium (mg/L)	n/a	0.0165	n/a	n/a	n/a	96	n/a	n/a	0	n/a	n/a	0.007269	NP Inter
Beryllium (mg/L)	n/a	0.0121	n/a	n/a	n/a	94	n/a	n/a	84.04	n/a	n/a	0.008054	NP Inter
Cadmium (mg/L)	n/a	0.00598	n/a	n/a	n/a	94	n/a	n/a	45.74	n/a	n/a	0.008054	NP Inter
Chromium (mg/L)	n/a	0.0105	n/a	n/a	n/a	96	n/a	n/a	89.58	n/a	n/a	0.007269	NP Inter
Cobalt (mg/L)	n/a	0.49	n/a	n/a	n/a	94	n/a	n/a	26.6	n/a	n/a	0.008054	NP Inter
Combined Radium 226 + 228 (pCi/L)	n/a	1.47	n/a	n/a	n/a	92	n/a	n/a	0	n/a	n/a	0.008924	NP Inter
Fluoride, total (mg/L)	n/a	0.63	n/a	n/a	n/a	100	n/a	n/a	0	n/a	n/a	0.005921	NP Inter
Lead (mg/L)	n/a	0.00108	n/a	n/a	n/a	95	n/a	n/a	95.79	n/a	n/a	0.007651	NP Inter
Lithium (mg/L)	n/a	0.419	n/a	n/a	n/a	96	n/a	n/a	0	n/a	n/a	0.007269	NP Inter
Mercury (mg/L)	n/a	0.0005	n/a	n/a	n/a	96	n/a	n/a	100	n/a	n/a	0.007269	NP Inter
Molybdenum (mg/L)	n/a	0.0002	n/a	n/a	n/a	96	n/a	n/a	97.92	n/a	n/a	0.007269	NP Inter
Selenium (mg/L)	n/a	0.0209	n/a	n/a	n/a	96	n/a	n/a	60.42	n/a	n/a	0.007269	NP Inter
Thallium (mg/L)	n/a	0.000226	n/a	n/a	n/a	96	n/a	n/a	96.88	n/a	n/a	0.007269	NP Inter

FIGURE H.

GORGAS CCR LANDFILL GWPS			
Analyte	**Units**	**Background**	**GWPS**
Antimony	mg/L	0.00143	0.006
Arsenic	mg/L	0.005	0.01
Barium	mg/L	0.0165	2
Beryllium	mg/L	0.0121	0.004
Cadmium	mg/L	0.00598	0.005
Chromium	mg/L	0.0105	0.1
Cobalt	mg/L	0.49	0.49
Combined Radium-226/228	pCi/L	1.47	5
Fluoride	mg/L	0.63	4
Lead	mg/L	0.00108	0.015
Lithium	mg/L	0.419	0.419
Mercury	mg/L	0.0005	0.002
Molybdenum	mg/L	0.0002	0.1
Selenium	mg/L	0.0209	0.05
Thallium	mg/L	0.000226	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 second semi-annual sampling event in 2021.

FIGURE I.

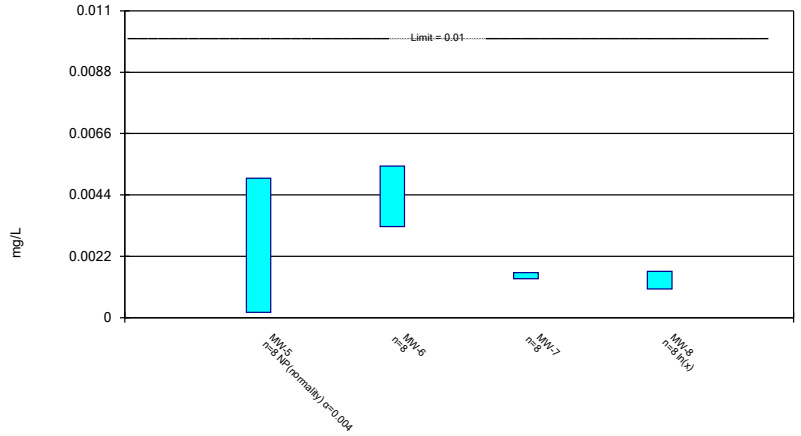
Confidence Intervals - All Results (No Significant)

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF Printed 5/17/2023, 2:46 PM

Constituent	Well	Upper Lim.	Lower Lim.	Compliance	Sig.	N	Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Arsenic (mg/L)	MW-5	0.005	0.00019	0.01	No	8	0.00164	0.002126	25	None	No	0.004	NP (normality)
Arsenic (mg/L)	MW-6	0.005436	0.003264	0.01	No	8	0.00435	0.001025	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-7	0.001617	0.001398	0.01	No	8	0.001508	0.0001031	0	None	No	0.01	Param.
Arsenic (mg/L)	MW-8	0.001656	0.00103	0.01	No	8	0.001338	0.0003428	0	None	ln(x)	0.01	Param.
Barium (mg/L)	MW-5	0.01287	0.01063	2	No	8	0.01175	0.001054	0	None	No	0.01	Param.
Barium (mg/L)	MW-6	0.01516	0.01296	2	No	8	0.01406	0.001039	0	None	No	0.01	Param.
Barium (mg/L)	MW-7	0.0147	0.01306	2	No	8	0.01389	0.0008043	0	None	x^3	0.01	Param.
Barium (mg/L)	MW-8	0.01457	0.0136	2	No	8	0.01409	0.0004581	0	None	No	0.01	Param.
Beryllium (mg/L)	MW-6	0.0009721	0.0002071	0.004	No	8	0.0008748	0.0002821	50	Kaplan-Meier	x^2	0.01	Param.
Cadmium (mg/L)	MW-6	0.001305	0.00004582	0.005	No	8	0.0007151	0.0007993	37.5	Kaplan-Meier	x^(1/3)	0.01	Param.
Chromium (mg/L)	MW-5	0.001015	0.00027	0.1	No	8	0.0009219	0.0002634	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-6	0.00102	0.00024	0.1	No	8	0.0007406	0.0003859	62.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-7	0.001015	0.00032	0.1	No	8	0.0009281	0.0002457	87.5	None	No	0.004	NP (NDs)
Chromium (mg/L)	MW-8	0.001015	0.00025	0.1	No	8	0.0009194	0.0002705	87.5	None	No	0.004	NP (NDs)
Cobalt (mg/L)	MW-5	0.005	0.000538	0.49	No	8	0.00246	0.002113	37.5	None	No	0.004	NP (normality)
Cobalt (mg/L)	MW-6	0.4074	0.04205	0.49	No	8	0.2143	0.2004	0	None	sqrt(x)	0.01	Param.
Cobalt (mg/L)	MW-7	0.006127	0.003563	0.49	No	8	0.004845	0.00121	0	None	No	0.01	Param.
Cobalt (mg/L)	MW-8	0.008278	0.006947	0.49	No	8	0.007613	0.000628	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-5	0.8369	0.2596	5	No	8	0.5483	0.2723	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-6	2.522	0.1331	5	No	8	1.328	1.127	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-7	0.7205	0.291	5	No	8	0.5058	0.2026	0	None	No	0.01	Param.
Combined Radium 226 + 228 (pCi/L)	MW-8	2.19	0.398	5	No	8	0.8184	0.6442	0	None	No	0.004	NP (normality)
Fluoride, total (mg/L)	MW-5	0.3348	0.2552	4	No	8	0.295	0.0375	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-6	0.1548	0.116	4	No	8	0.1354	0.01828	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-7	0.2435	0.1595	4	No	8	0.2015	0.03959	0	None	No	0.01	Param.
Fluoride, total (mg/L)	MW-8	0.2308	0.1714	4	No	8	0.2011	0.02803	0	None	No	0.01	Param.
Lead (mg/L)	MW-6	0.000457	0.0002	0.015	No	8	0.0002361	0.00008995	75	None	No	0.004	NP (NDs)
Lead (mg/L)	MW-8	0.000203	0.000088	0.015	No	8	0.0001486	0.00005849	50	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-5	0.1267	0.09462	0.419	No	8	0.1107	0.01514	0	None	No	0.01	Param.
Lithium (mg/L)	MW-6	0.2487	0.09719	0.419	No	8	0.1707	0.0862	0	None	x^2	0.01	Param.
Lithium (mg/L)	MW-7	0.131	0.0907	0.419	No	8	0.1068	0.01712	0	None	No	0.004	NP (normality)
Lithium (mg/L)	MW-8	0.163	0.1263	0.419	No	8	0.1446	0.01732	0	None	No	0.01	Param.
Molybdenum (mg/L)	MW-5	0.01	0.000945	0.1	No	8	0.004488	0.004566	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-6	0.0002823	0.00004206	0.1	No	8	0.0001941	0.00008803	50	Kaplan-Meier	No	0.01	Param.
Molybdenum (mg/L)	MW-7	0.01	0.000846	0.1	No	8	0.004342	0.004686	37.5	None	No	0.004	NP (normality)
Molybdenum (mg/L)	MW-8	0.0129	0.00031	0.1	No	8	0.005529	0.005636	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	MW-5	0.01	0.00124	0.05	No	8	0.004927	0.004216	37.5	None	No	0.004	NP (normality)
Selenium (mg/L)	MW-6	0.0019	0.001015	0.05	No	8	0.001126	0.0003129	87.5	None	No	0.004	NP (NDs)
Selenium (mg/L)	MW-7	0.001015	0.000677	0.05	No	8	0.0009728	0.0001195	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-5	0.000203	0.00007	0.002	No	8	0.0001864	0.00004702	87.5	None	No	0.004	NP (NDs)
Thallium (mg/L)	MW-6	0.000203	0.00011	0.002	No	8	0.0001839	0.00003649	75	None	No	0.004	NP (NDs)

Parametric and Non-Parametric (NP) Confidence Interval

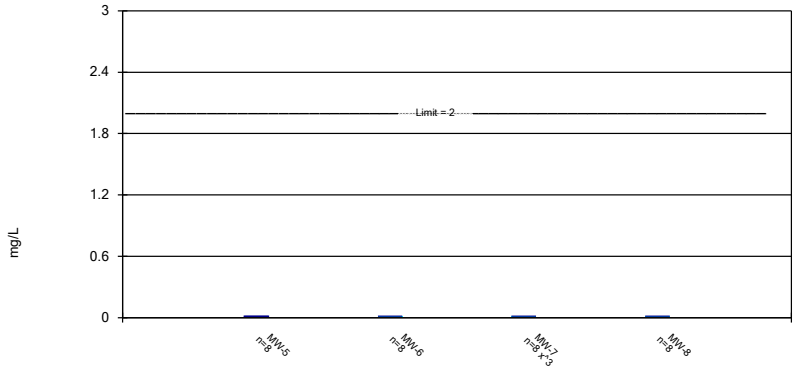
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Arsenic Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric Confidence Interval

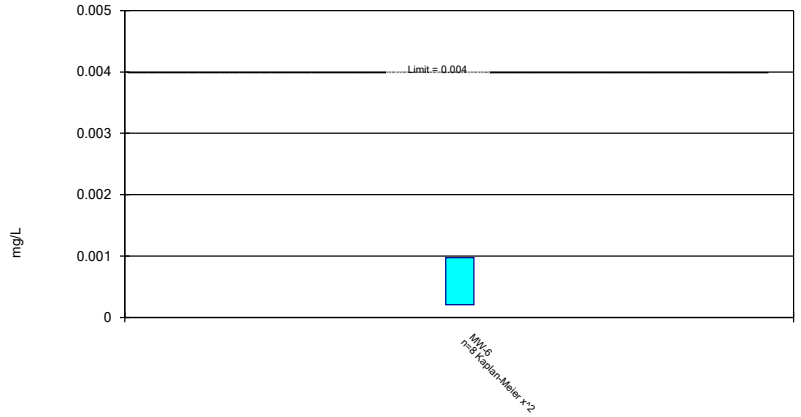
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Barium Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric Confidence Interval

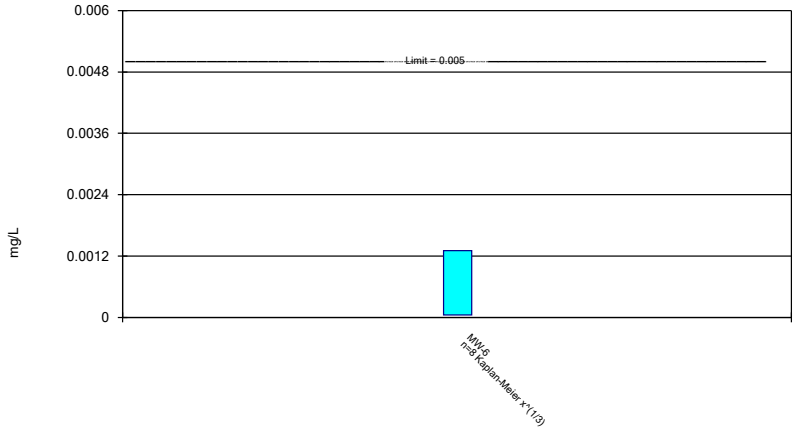
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Beryllium Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric Confidence Interval

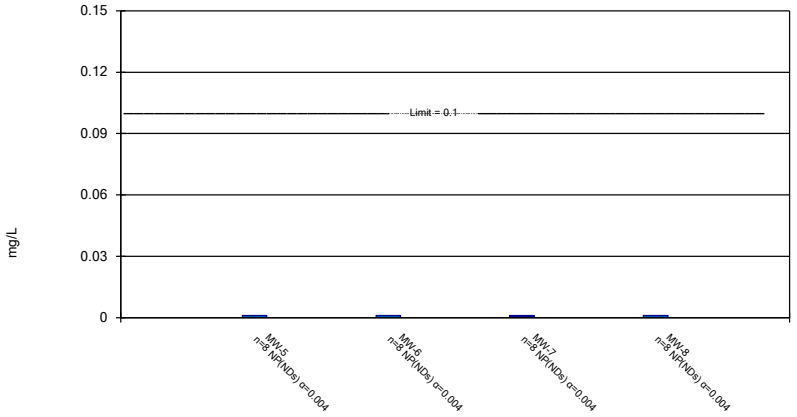
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cadmium Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Non-Parametric Confidence Interval

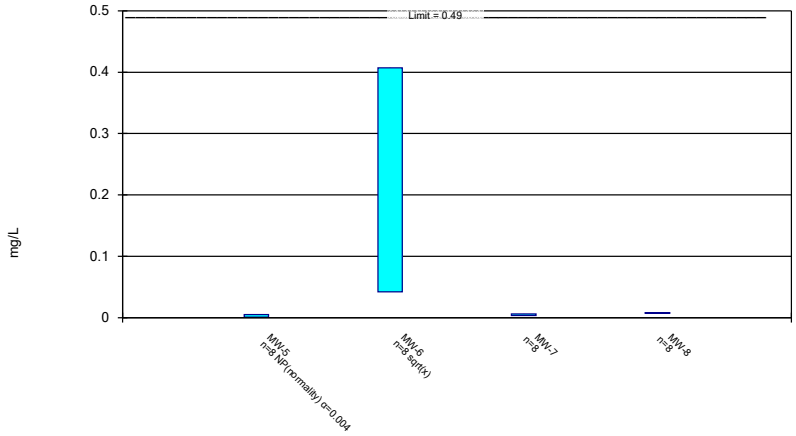
Compliance Limit is not exceeded.



Constituent: Chromium Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric and Non-Parametric (NP) Confidence Interval

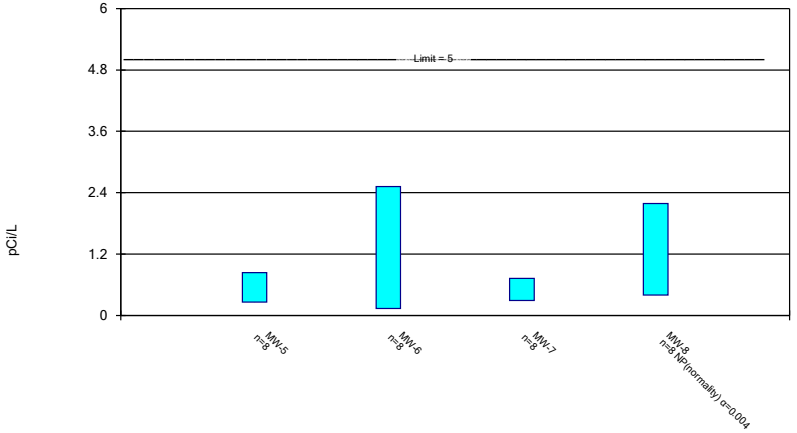
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Cobalt Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric and Non-Parametric (NP) Confidence Interval

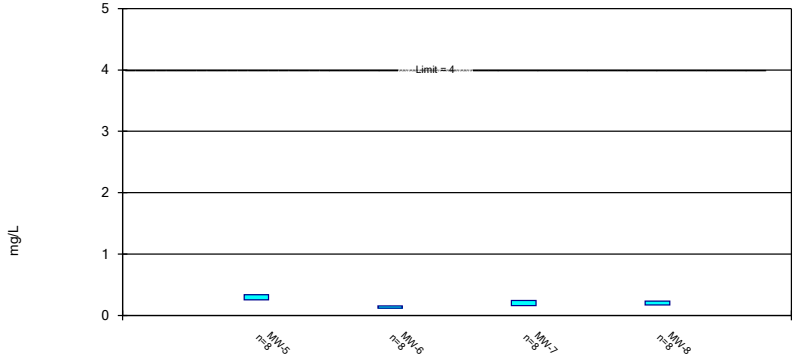
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Combined Radium 226 + 228 Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric Confidence Interval

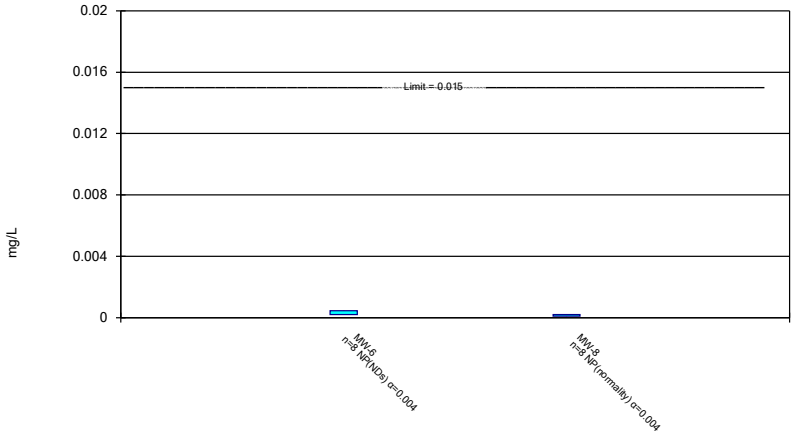
Compliance Limit is not exceeded. Per-well alpha = 0.01. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Fluoride, total Analysis Run 5/17/2023 2:45 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Non-Parametric Confidence Interval

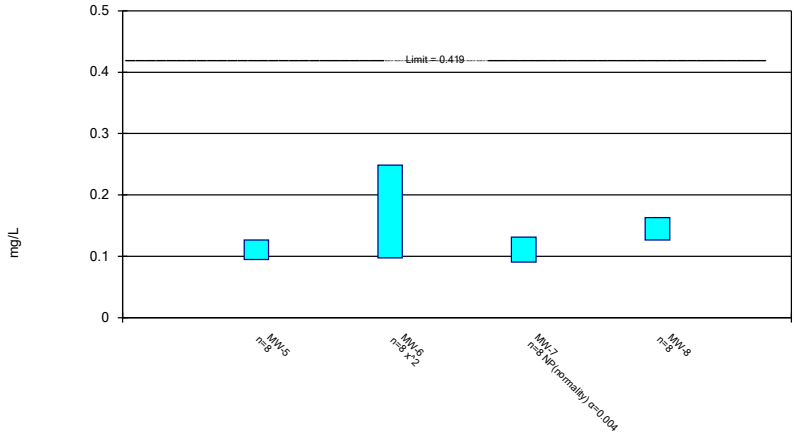
Compliance Limit is not exceeded.



Constituent: Lead Analysis Run 5/17/2023 2:46 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric and Non-Parametric (NP) Confidence Interval

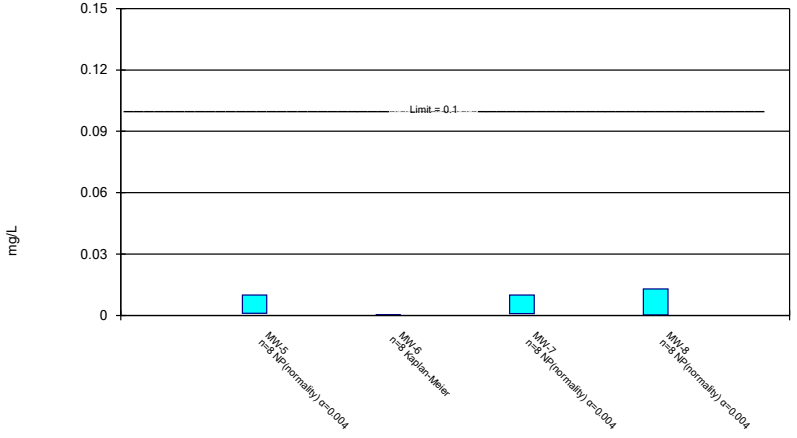
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



Constituent: Lithium Analysis Run 5/17/2023 2:46 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Parametric and Non-Parametric (NP) Confidence Interval

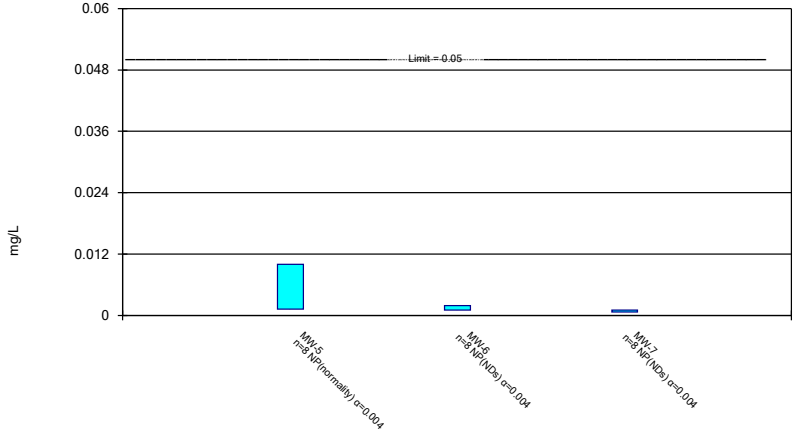
Compliance Limit is not exceeded. Per-well alpha = 0.01 except as noted. Normality Test: Shapiro Wilk, alpha based on n.



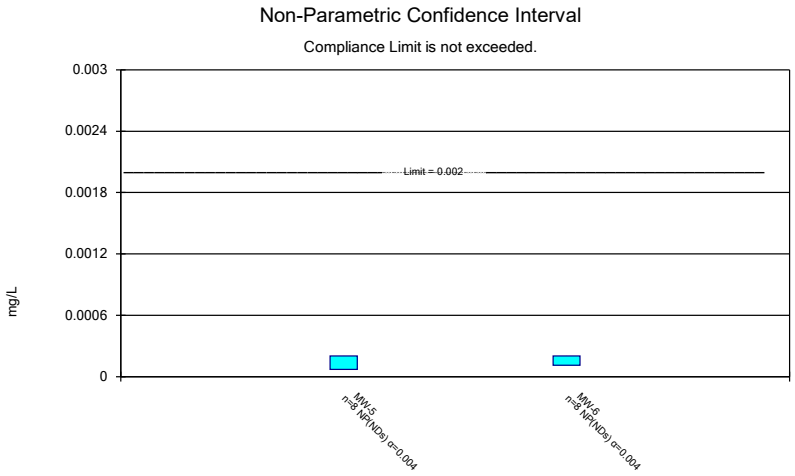
Constituent: Molybdenum Analysis Run 5/17/2023 2:46 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Non-Parametric Confidence Interval

Compliance Limit is not exceeded.



Constituent: Selenium Analysis Run 5/17/2023 2:46 PM View: Appendix IV
Plant Gorgas Client: Southern Company Data: Gorgas CCR LF



Constituent: Thallium Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

Confidence Interval

Constituent: Arsenic (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			0.00145 (J)	
10/9/2019				0.00142 (J)
10/10/2019	<0.005	0.00473 (J)		
4/7/2020	0.00163 (J)			
4/8/2020		0.00232 (J)	0.00136 (J)	0.00102 (J)
7/14/2020	<0.005	0.0048 (J)	0.00147 (J)	
7/15/2020				0.00212 (J)
2/23/2021	0.000309	0.00494	0.00141	0.00117
7/20/2021		0.00475	0.00164	0.00111
7/21/2021	0.00046			
1/31/2022	0.00019 (J)	0.00435	0.00156	
2/1/2022				0.00131
7/6/2022	0.000225	0.00554	0.00164	0.00136
2/21/2023	0.000306		0.00153	0.00119
2/22/2023		0.00337		
Mean	0.00164	0.00435	0.001508	0.001338
Std. Dev.	0.002126	0.001025	0.0001031	0.0003428
Upper Lim.	0.005	0.005436	0.001617	0.001656
Lower Lim.	0.00019	0.003264	0.001398	0.00103

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Barium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			0.0145	
10/9/2019				0.0137
10/10/2019	0.0105	0.0152		
4/7/2020	0.0137			
4/8/2020		0.0128	0.0127	0.0137
7/14/2020	0.0124	0.0154	0.0148	
7/15/2020				0.0143
2/23/2021	0.0116	0.0143	0.014	0.014
7/20/2021		0.0143	0.0142	0.0141
7/21/2021	0.0116			
1/31/2022	0.0104	0.0125	0.0126	
2/1/2022				0.0135
7/6/2022	0.0117	0.0144	0.0142	0.0146
2/21/2023	0.0121		0.0141	0.0148
2/22/2023		0.0136		
Mean	0.01175	0.01406	0.01389	0.01409
Std. Dev.	0.001054	0.001039	0.0008043	0.0004581
Upper Lim.	0.01287	0.01516	0.0147	0.01457
Lower Lim.	0.01063	0.01296	0.01306	0.0136

Confidence Interval

Constituent: Beryllium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6
10/10/2019	<0.001015
4/8/2020	0.000788 (J)
7/14/2020	<0.001015
2/23/2021	<0.001015
7/20/2021	0.00048 (J)
1/31/2022	0.00044 (J)
7/6/2022	<0.001015
2/22/2023	0.00123
Mean	0.0008748
Std. Dev.	0.0002821
Upper Lim.	0.0009721
Lower Lim.	0.0002071

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cadmium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6
10/10/2019	<0.000203
4/8/2020	0.00204
7/14/2020	<0.000203
2/23/2021	<0.000203
7/20/2021	0.00058
1/31/2022	0.0005
7/6/2022	7.2E-05 (J)
2/22/2023	0.00192
Mean	0.0007151
Std. Dev.	0.0007993
Upper Lim.	0.001305
Lower Lim.	4.582E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Chromium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			<0.001015	
10/9/2019				<0.001015
10/10/2019	<0.001015	<0.00102		
4/7/2020	<0.001015			
4/8/2020		<0.00102	<0.001015	<0.001015
7/14/2020	<0.001015	<0.00102	<0.001015	
7/15/2020				<0.001015
2/23/2021	<0.001015	<0.00102	<0.001015	<0.001015
7/20/2021		<0.00102	<0.001015	<0.001015
7/21/2021	<0.001015			
1/31/2022	0.00027 (J)	0.00024 (J)	0.00032 (J)	
2/1/2022				0.00025 (J)
7/6/2022	<0.001015	0.000284 (J)	<0.001015	<0.001015
2/21/2023	<0.001015		<0.001015	<0.001015
2/22/2023		0.000301 (J)		
Mean	0.0009219	0.0007406	0.0009281	0.0009194
Std. Dev.	0.0002634	0.0003859	0.0002457	0.0002705
Upper Lim.	0.001015	0.00102	0.001015	0.001015
Lower Lim.	0.00027	0.00024	0.00032	0.00025

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Cobalt (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			0.00408 (J)	
10/9/2019				0.00864
10/10/2019	<0.005	0.0425		
4/7/2020	<0.005			
4/8/2020		0.479	0.00394 (J)	0.00762
7/14/2020	<0.005	0.0916	0.00653	
7/15/2020				0.00821
2/23/2021	0.00102	0.0771	0.00294	0.00796
7/20/2021		0.216	0.00561	0.00714
7/21/2021	0.00127			
1/31/2022	0.00094	0.174	0.00546	
2/1/2022				0.0075
7/6/2022	0.000538	0.0675	0.0059	0.00701
2/21/2023	0.00091		0.0043	0.00682
2/22/2023		0.567		
Mean	0.00246	0.2143	0.004845	0.007613
Std. Dev.	0.002113	0.2004	0.00121	0.000628
Upper Lim.	0.005	0.4074	0.006127	0.008278
Lower Lim.	0.000538	0.04205	0.003563	0.006947

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Combined Radium 226 + 228 (pCi/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			0.345 (U)	
10/9/2019				0.416 (U)
10/10/2019	0.811 (U)	1.71		
4/7/2020	0.48 (U)			
4/8/2020		0.179 (U)	0.237 (U)	1.38 (U)
7/14/2020	0.521	0.578	0.434	
7/15/2020				0.398 (U)
2/23/2021	0.71 (U)	1.15 (U)	0.696 (U)	0.685 (U)
7/20/2021		1.32	0.356 (U)	0.42 (U)
7/21/2021	0.79 (U)			
1/31/2022	0.0523 (U)	0.374 (U)	0.473 (U)	
2/1/2022				0.643 (U)
7/6/2022	0.747 (U)	1.56	0.716 (U)	0.415 (U)
2/21/2023	0.275 (U)		0.789 (U)	2.19
2/22/2023		3.75		
Mean	0.5483	1.328	0.5058	0.8184
Std. Dev.	0.2723	1.127	0.2026	0.6442
Upper Lim.	0.8369	2.522	0.7205	2.19
Lower Lim.	0.2596	0.1331	0.291	0.398

Confidence Interval

Constituent: Fluoride, total (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
5/15/2019		0.133		
10/8/2019			0.183	
10/9/2019				0.189
10/10/2019	0.338	0.124		
4/7/2020	0.225			
4/8/2020		<0.1 (o)	0.153	0.192
7/14/2020	0.263	0.115	0.193	
7/15/2020				0.196
2/23/2021	0.287	0.139	0.2	0.208
7/20/2021		0.131	0.286	0.262
7/21/2021	0.331			
1/31/2022	0.291	0.121	0.173	
2/1/2022				0.177
7/6/2022	0.306	0.147	0.208	0.173
2/21/2023	0.319		0.216	0.212
2/22/2023		0.173		
Mean	0.295	0.1354	0.2015	0.2011
Std. Dev.	0.0375	0.01828	0.03959	0.02803
Upper Lim.	0.3348	0.1548	0.2435	0.2308
Lower Lim.	0.2552	0.116	0.1595	0.1714

Confidence Interval

Constituent: Lead (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-6	MW-8
10/9/2019		<0.000203
10/10/2019	<0.0002	
4/8/2020	<0.0002	<0.000203
7/14/2020	<0.0002	
7/15/2020		<0.000203
2/23/2021	<0.0002	<0.000203
7/20/2021	<0.0002	9E-05 (J)
1/31/2022	<0.0002	
2/1/2022		9E-05 (J)
7/6/2022	0.000232	0.000109 (J)
2/21/2023		8.8E-05 (J)
2/22/2023	0.000457	
Mean	0.0002361	0.0001486
Std. Dev.	8.995E-05	5.849E-05
Upper Lim.	0.000457	0.000203
Lower Lim.	0.0002	8.8E-05

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Lithium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			0.131	
10/9/2019				0.163
10/10/2019	0.0981	0.251		
4/7/2020	0.133			
4/8/2020		0.0489	0.117	0.149
7/14/2020	0.11	0.223	0.103	
7/15/2020				0.152
2/23/2021	0.133	0.253	0.131	0.166
7/20/2021		0.18	0.096	0.151
7/21/2021	0.113			
1/31/2022	0.0932	0.161	0.0907	
2/1/2022				0.124
7/6/2022	0.101	0.216	0.0926	0.132
2/21/2023	0.104		0.0932	0.12
2/22/2023		0.0329		
Mean	0.1107	0.1707	0.1068	0.1446
Std. Dev.	0.01514	0.0862	0.01712	0.01732
Upper Lim.	0.1267	0.2487	0.131	0.163
Lower Lim.	0.09462	0.09719	0.0907	0.1263

Confidence Interval

Constituent: Molybdenum (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7	MW-8
10/8/2019			<0.01	
10/9/2019				<0.01
10/10/2019	<0.01	<0.000203		
4/7/2020	<0.01			
4/8/2020		<0.000203	<0.01	<0.01
7/14/2020	<0.01	<0.000203	<0.01	
7/15/2020				<0.01
2/23/2021	0.0014	0.000285	0.00107	0.0129
7/20/2021		7E-05 (J)	0.00086	0.00033
7/21/2021	0.00126			
1/31/2022	0.00126	7E-05 (J)	0.00093	
2/1/2022				0.00031
7/6/2022	0.00104	0.000316	0.000846	0.000351
2/21/2023	0.000945		0.00103	0.000338
2/22/2023		<0.000203		
Mean	0.004488	0.0001941	0.004342	0.005529
Std. Dev.	0.004566	8.803E-05	0.004686	0.005636
Upper Lim.	0.01	0.0002823	0.01	0.0129
Lower Lim.	0.000945	4.206E-05	0.000846	0.00031

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Selenium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6	MW-7
10/8/2019			<0.001015
10/10/2019	<0.01	<0.001015	
4/7/2020	<0.01		
4/8/2020		<0.001015	<0.001015
7/14/2020	<0.01	<0.001015	<0.001015
2/23/2021	0.00233	<0.001015	<0.001015
7/20/2021		<0.001015	<0.001015
7/21/2021	0.00178		
1/31/2022	0.00237	<0.001015	<0.001015
7/6/2022	0.0017	<0.001015	0.000677 (J)
2/21/2023	0.00124		<0.001015
2/22/2023		0.0019	
Mean	0.004927	0.001126	0.0009728
Std. Dev.	0.004216	0.0003129	0.0001195
Upper Lim.	0.01	0.0019	0.001015
Lower Lim.	0.00124	0.001015	0.000677

ND substitution: RL or RL/2 if <15% NDs.

Confidence Interval

Constituent: Thallium (mg/L) Analysis Run 5/17/2023 2:46 PM View: Appendix IV

Plant Gorgas Client: Southern Company Data: Gorgas CCR LF

	MW-5	MW-6
10/10/2019	<0.000203	<0.000203
4/7/2020	<0.000203	
4/8/2020		<0.000203
7/14/2020	<0.000203	<0.000203
2/23/2021	<0.000203	<0.000203
7/20/2021		<0.000203
7/21/2021	<0.000203	
1/31/2022	7E-05 (J)	0.00011 (J)
7/6/2022	<0.000203	<0.000203
2/21/2023	<0.000203	
2/22/2023		0.000143 (J)
Mean	0.0001864	0.0001839
Std. Dev.	4.702E-05	3.649E-05
Upper Lim.	0.000203	0.000203
Lower Lim.	7E-05	0.00011

ND substitution: RL or RL/2 if <15% NDs.